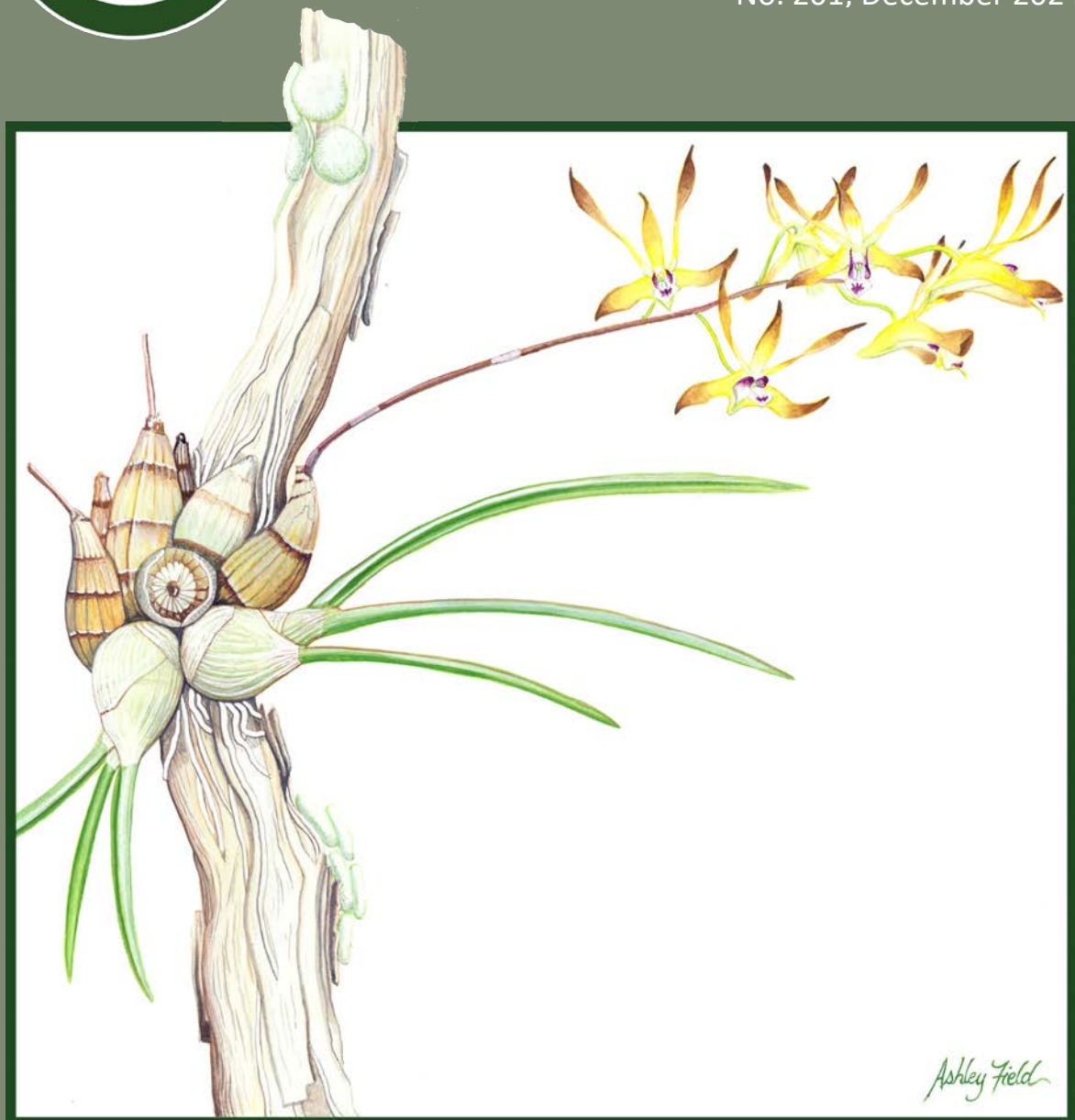




Newsletter

Australasian Systematic Botany Society

No. 201, December 2024



4

The indefatigable
botanist

Vale Paul G. Wilson

36

AGM 2024

Minutes and reports from
the society's 2024 Annual
General Meeting

62

'Twice as thick as a
hog's bristle'

Article on irregular units of
measure

Australasian Systematic Botany Society
Incorporated Council

Council President

Katharina Nargar
Australian Tropical Herbarium, JCU
PO Box 6811,
Cairns QLD 4870, Australia
(+617)/(07) 4232 1686
president.asbs@gmail.com

Vice President

Peter Heenan
Manaaki Whenua Landcare Research
PO Box 469040
Lincoln 7640, New Zealand
vicepres.asbs@gmail.com

Secretary

Tim Collins
Department of Climate Change,
Energy, the Environment and Water
11 Farrer Place
Queanbeyan NSW 2620
(+61) 458 857 877
secretary.asbs@gmail.com

Treasurer

Mike Bayly
The University of Melbourne
Parkville VIC 3010, Australia
(+613)/(03) 8344 5055
treasurer.asbs@gmail.com

Councillor

Kerry Ford
Allan Herbarium
Manaaki-Whenua Landcare Research
PO Box 69040
Lincoln 7640, New Zealand
councillor2.asbs@gmail.com

Councillor

Lalita Simpson
Australian Tropical Herbarium, JCU
PO Box 6811,
Cairns QLD 4870, Australia
councillor1.asbs@gmail.com

ASBS Research Committee

Chair: Peter Heenan, ex officio
Benjamin Anderson, Janet Gagul,
Sarah Mathews, Jennifer Tate

Public Officer

Anna Monro anna.monro@dcceew.gov.au

Advisory Standing Committees

Financial

Chair: Mike Bayly, ex officio
David Cantrill, Bob Hill

Ad hoc adviser: Bruce Evans

Grants Policy

Chair: Mike Bayly, ex officio
Gillian Brown, Alexander Schmidt-Lebuhn,
Jen Tate, Peter Weston, Peter Wilson

Webmasters

Anna Monro
Kelly Shepherd
webmaster.asbs@gmail.com

Facebook Group Administrator

Mike Bayly mbayly@unimelb.edu.au

ASBS Newsletter Editorial Team

Editors

Helen Kennedy editor.asbsnews@gmail.com

Production editor

Kelly Shepherd

Section Editor — Book reviews

John Clarkson John.Clarkson@des.qld.gov.au

If you receive an email purporting to be from an ASBS office bearer, please verify the email address of the sender before responding or clicking on links to avoid scams or phishing. If in doubt, please contact us via already established forms of contact first.

Connect with us



<http://www.asbs.org.au>



[Australasian Systematic Botany Society \(ASBS\)](#)



[@ASBS_botany](#)

Previous issue No. 200 published:
16 Oct 2024 (print), 4 Oct 2024 (digital)

In this issue

- 2 From the President
- 3 From the Editor
- 4 The indefatigable botanist
- 32 It's hard to say goodbye to a personal hero
- 34 Jacob John – in Memoriam
- 36 ASBS AGM 2024
- 37 President's report
- 38 Treasurer's report 2023/24
- 51 Student/ECR Subcommittee report
- 51 Newsletter report
- 54 Research committee report
- 56 Webmasters' report
- 57 Facebook report
- 58 Research Grants
- 58 Northern Territory Herbarium News
- 61 Two Books, Two Days, Two States
- 62 Twice as thick as a hog's bristle
- 65 Far from Decorative Prints
- 67 Figs and myself
- 68 The newsletter
- 68 The society
- 69 Chapter conveners
- 69 Major Australasian herbaria and systematics institutions contacts

From the President

Katharina Nargar, ASBS President

It was a pleasure seeing many of you at the 46th Annual General Meeting (AGM) of the Society, where updates on this year's Council activities and achievements were shared. For those unable to attend, the full AGM report can be found in this issue. I would like to briefly highlight some of the key points discussed.

First, I am delighted to welcome Helen Kennedy as the new editor of our newsletter. I am incredibly grateful to Helen for taking on this important role, and to the interim newsletter team, led by John Clarkson, for maintaining the newsletter during the transition. As announced at the AGM, there will be several changes to the newsletter format. These include a full transition to a digital-only format, as well as a new layout that will make copy editing and home printing easier for those who prefer a hard copy. Thank you, Helen, for leading these changes—I'm excited to see the new look of the newsletter.

At the AGM, it was my great pleasure to announce Karen Louise Wilson AM as the recipient of the Nancy Burbidge Medal for 2024. Karen is receiving the Society's highest award in recognition of her long-standing and significant contributions to Australasian systematic botany. A foundation member of the Society, Karen has remained active throughout the years, including serving four terms on the Council during the Society's formative years. She has been a tireless advocate for plant systematics, both in Australia and worldwide, through her research, teaching, and organizational efforts. In 2008, Karen was awarded a Member of the Order of Australia (AM) for her contributions to botany, particularly her work in recording and documenting Australian biodiversity.

Karen has had a remarkably productive career as an international authority on several plant families, including Casuarinaceae, Cyperaceae, Juncaceae, and Polygonaceae. She has authored over 246 publications and 148 botanical names are published by K.L.Wilson—a truly extraordinary achievement. Karen has also played a key role in international initiatives related to biodiversity and bioinformatics, such as the International

Organisation for Plant Information's Global Plant Checklist, Flora of the World Online, Species 2000, and the Catalogue of Life. In 2011, she served as Secretary General for the International Botanical Congress. Additionally, Karen has been a dedicated mentor, training the next generation of plant systematists and taxonomists. Congratulations, Karen, on this well-deserved recognition!

The official Nancy T. Burbidge Award ceremony for Karen, along with the Nancy T. Burbidge Lecture, will take place at the next ASBS conference in 2025.

Turning to the next generation of plant systematists, I am pleased to congratulate Yuqun Du (University of Melbourne) for receiving the Hansjörg Eichler Grant for her project, "Resolving the taxonomy and diversity of Pterosiphoniae in Australasia". This subtribe belongs to the largest red algae family, Rhodomelaceae. Best of luck with your project, Yuqun. Finally, I would like to share some exciting news from our Treasurer, Mike Bayly, about the



Figure 1. Karen Wilson. Image by: Hannah McPherson.

establishment of the Gareth Nelson Award. This new award, funded by a generous anonymous donation, will recognise postgraduate students and early-career postdoctoral researchers working in the fields of systematic botany and biogeography in Australasia. The award honors Prof. Gareth Nelson, whose contributions to the theory and practice of phylogenetic systematics and historical biogeography have been truly influential. The first call for applications is expected in 2025.

With best wishes for the new year,

Katharina

From the Editor

*Helen Kennedy,
Australian National Herbarium*

Number 201 seems like a lucky number on which to start my stint as the editor of our society's newsletter. Thank you for trusting me with the next 20 or so issues, assuming I last about five years in the role. Working in herbarium curation, I think it's natural to develop a sense of 'taking your turn' with work, that when done well, has no clear endpoint. An herbarium is a project that spans generations and so does the *ASBS Newsletter*, I hope to help keep it thriving for years to come.

This issue includes obituaries for two remarkable botanists: the late Paul Wilson and Jacob John. I would like to express my deep gratitude to

the authors of these obituaries, who have so thoughtfully and eloquently captured the many significant contributions these colleagues made to the taxonomic community.

I also want to extend heartfelt thanks to all the contributors to this issue. If submissions continue to come in at this rate, my job will be a breeze! I particularly enjoyed John Huismans' quirky article on creative units of measurement. In response, John Clarkson sent me the comic featured below, which is certainly fitting.

And speaking of John Clarkson, I owe him a special thank you for encouraging me to step into the role of editor—and for not abandoning me once I did!

That's enough from me—enjoy the issue!

Helen



Editor's note: COVID saw all sorts of strange units of measurement used to encourage social distancing.

The indefatigable botanist

Paul Graham Wilson (January 1928 – July 2024)

Brendan J. Lepschi¹, Bruce R. Maslin², William (Bill) R. Barker³, Annette J.G. Wilson², Alex S. George⁴ and Margaret A. Wilson⁵

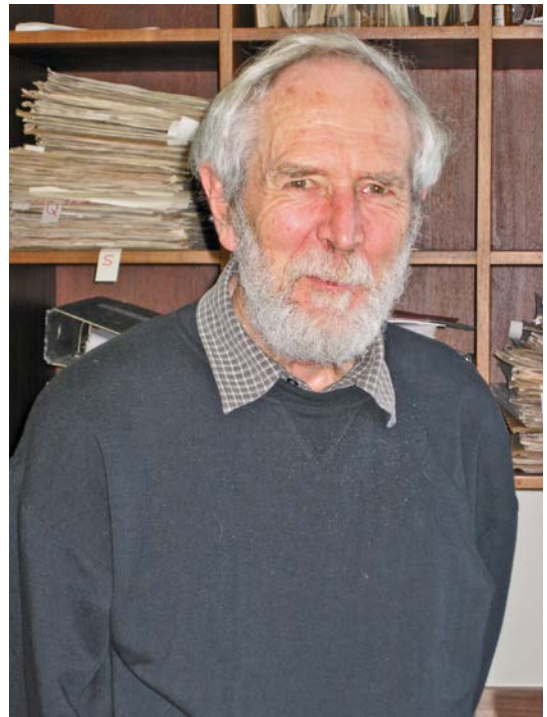
¹Australian National Herbarium, Centre for National Biodiversity Research, GPO Box 1700, Canberra, ACT 2601; ²Western Australian Herbarium, Biodiversity and Conservation Science, Department of Biodiversity, Conservation and Attractions, Locked Bag 104, Bentley Delivery Centre, WA 6983; ³State Herbarium of South Australia, Botanic Gardens and State Herbarium, Hackney Road, Adelaide, SA 5000; ⁴Murdoch University Herbarium, 90 South St, Murdoch, WA 6150; ⁵Mundaring, WA 6163

A scholar, a greatly liked and highly regarded leader in his field, Australian botany lost a true gentleman with the passing of Paul Wilson. Respectful, courteous, kind, gentle and supportive, Paul Wilson was one of a now rapidly dwindling cohort of botanists who developed and shaped the direction and nature of systematic botany in Australia in the immediate decades of the post-World War II period. With a career spanning 64 years, both as a salaried employee and an honorary researcher, Paul sought to understand and document some of the most taxonomically challenging and environmentally important plant groups on the Australian continent. He did so with characteristic determination, resolve and humility, all the while generously sharing his knowledge and expertise with his colleagues and friends, both young and old, wise, and inexperienced. His passing marks the end of a substantial personal contribution to our discipline, and the loss of a genuine, decent, and delightful individual.

Early life: South Africa and England 1928 – 1952

Born to English parents in January 1928, near Tzaneen, Limpopo Province in South Africa, Paul was the youngest of three children, preceded by elder sister Sylvia and eldest brother Valette (Val). Paul's earliest days were spent on the family farm Buji Buji; however, his father died shortly after he was born and his mother felt she could not run the farm on her own. She elected to return to England in 1929, where the family lived initially in Paul's grandmother's home near London until he was three or four years of age. Paul's mother began working as a secretary for a French company in

London, but when the Depression worsened and the firm closed, she managed to get a full-time job in a plant nursery, while Paul's grandmother looked after the children. Despite some hardships, Paul's recollections were nevertheless of an enjoyable childhood – but one that was thrown into chaos when, in 1939, World War II broke out. Paul was 11. In the year prior, he had taken a Scholarship exam and obtained a place at Grays Palmer School. In Paul's words:



Paul Wilson, in his office at the Western Australian Herbarium, 2002. Image: Bruce Maslin.

I did not start school until rather late in the year apparently because the Government was uncertain as to whether Grays Palmer School should continue at Grays, which was considered to be in a vulnerable area. When I did start it was for only 2 days a week, which meant that the rest of the time I was home by myself and got into a miserable state.

Like thousands of British children in the early years of the war, Paul was separated from his immediate family and evacuated, in his case to Somerset to live with a cousin's family who were connected to the British admiralty. Paul's grandmother moved him to the safety of Keynsham, near Bath, to stay with his aunt Katie's family, and he was sent to a local school where he excelled – except in gardening! There he gained his School Certificate. Paul recalled:

I stayed on with Aunt Katie and family. It was a wonderful relief being in Keynsham; the school I attended was the local Secondary School in Keynsham, everything was very easy, no homework, and instead of being considered mediocre at school I was now the brains of our class and was nicknamed 'Professor'. I also enjoyed the countryside and the companionship of my cousin Walter we had great fun together. In 1942 I took an exam which allowed me to go to Bath Technical College (Commercial School). I enjoyed my time at this school and eventually took the Oxford School Certificate Exam which gave me University Entrance.

Five long years after the evacuation, Paul was at last reunited with his family in 1944 by which time he was 16. Around 1946 there was a 'call-up' for the war effort. Paul related:

I registered as a Conscientious Objector, because I had been thinking a lot about fighting and war and thought it was wrong.

Paul's School Certificate did not include mathematics, only arithmetic suited to accountancy but he did not want to do Commerce. To get his Matriculation, he needed a job. Shortly after returning home, Paul saw an advertisement for a laboratory assistant at Guy's Hospital, London, in the Anatomy Department. Since he had an interest in anatomy and was the only person

to apply for the job, he got it. For the first couple of months at Guy's he worked in actual anatomy, working with cadavers, and learning how to operate an Epidiascope (an opaque projector, used to project images of opaque objects on to a screen) and slide projector. Two or three times a week, Paul attended lectures, as the projectionist, and found them quite interesting. After a couple of months, he moved into a section of anatomy that made sections from slides, while still attending lectures to work the Epidiascope. Before long he was moved into the Histology Department where he learnt to prepare slides.

Work at the Hospital did not consume all his time. The head of the Anatomy Department, Dr Willis, encouraged Paul to study mathematics at any opportunity during the day and so when he was not doing laboratory work, he studied. After working for five months in the Anatomy Department Paul took the Matriculation exam just before Christmas and passed, but he had to wait until July to enrol in university. At this point his income was raised by five shillings a week (to c. 40 shillings).

The following August he started studying at Chelsea Polytechnic for a Bachelor of Science, spending four days a week in the evening travelling on the train. His subjects were Botany, Zoology, Chemistry and Human Physiology. In his second year, requirements were altered so he only took three subjects, dropping Human Physiology, because he did not like dissection and the killing of animals. Paul related:

At this time I decided to become a vegan. Gradually my health declined, probably due to Vitamin B12 deficiency. I suffered constant tiredness. The fatigue has lasted over the years. Nevertheless, I eventually got my B.Sc. in three subjects.

Later Paul took up Geology, doing well in that. After graduating, he left Guys Hospital and got a job as a teacher at an independent boarding school in North Derbyshire, on the edge of the moors. He taught Biology and Chemistry, but he felt teaching was not his vocation, and so decided to get an Honours Degree in Botany.

When Paul finished his Honours degree, he

continued teaching. Paul and his brother Val had by this time both joined the Quakers, and in the early 1950s they went to a holiday work camp for young people in the mining village of Dowlais in Wales. While at the work camp, Paul met Jenny Lamb, a primary school teacher working in Derbyshire. A relationship soon developed, and Jenny and Paul were married in 1952, moving to Staines, Middlesex, soon after. Daughters Mary, Jane and Bryony were born throughout the mid-1950's: all were delivered at home by Paul.

Kew: first foray into botany (1953–1958)

In 1953, Paul found employment at the Herbarium of the Royal Botanic Gardens, Kew (K). Little detail is known of Paul's time at Kew, nor how he joined the staff, but he was initially employed as a Scientific Assistant in the Australasian Section. Bruce Maslin recalls Paul saying he worked with Australasian Section Head Ronald Melville, who had recently returned from a year's secondment to the National Herbarium of Victoria (MEL) during 1952–1953 (Sands 1986). Whilst in this section, Paul worked with several colleagues at a similar employment level (although Paul's degree seems to have given him a higher classification level), who became well-known to Australian botanists: Peter Taylor, a specialist in *Utricularia* L. (Lentibulariaceae); Martin Sands, a specialist in *Begonia* L. (Begoniaceae) who much later, in 1988, was to visit Western Australia in an expedition to the Kimberley; and Paul Darbyshire, who like Paul Wilson, subsequently took up an appointment in Australia as a botanical collector with the Canberra-based CSIRO Division of Land Research and Regional Survey (van Steenis-Kruseman 1974).

By 1957, Paul had moved to the role of Assistant Experimental Officer in the Americas Section. He also undertook studies on the flora of Mexico, resulting in his first botanical publication, a work based on the collections of G.B. Hinton from southern Mexico, which included the description of 22 new species from 11 plant families (Wilson 1958). Paul is pictured in a 1957 image of staff from the Royal Botanic Gardens Herbarium published in the *The Journal of The Kew Guild* in 1958 (see Figure 1).

In February 1958, Paul officially resigned from his position at Kew, and in April of that year the family departed England aboard P & O steamer the *Arcadia*. The ship docked first in Fremantle, Western Australia, where Paul took the opportunity to visit Charles Gardner, Curator of the Western Australian Herbarium (PERTH), which was then located at the Old Observatory at Mount Eliza next to Kings Park.

The family was greeted on arrival in Adelaide by Quakers Barbara and Fred Whitney and their young boys, John and David, who became family friends. Paul also became acquainted with South Australian flower painter Alison Marjorie Ashby, also a Quaker, and spoke of the great help she gave him in his early collecting. Paul and Jenny's fourth daughter Elizabeth was born in the early 1960s. Despite Paul having delivered the first three children, fathers were not allowed in the delivery room at this time, and baby Elizabeth was delivered by Adelaide Hospital staff.

In his first decade in Australia, based in Adelaide, Paul contributed hugely to the State Herbarium of South Australia and Australian botany more generally, a pattern that was to continue throughout his career.

Adelaide: a rapid involvement in Australian botany (1958–1965)

Paul took up his position at the newly established South Australian State Herbarium on 5 May 1958. His Adelaide story is therefore entwined with the institution's development, which is briefly recounted here to provide a context that is not in the public domain. The State Herbarium was a major component of a vision of its energetic Director, Noel Lothian, its Board and an influential wider community, for an Adelaide Botanic Gardens revitalised across all its activities (Lothian 1949; Board of Governors 1950; Robertson 1986; Orchard 1999b; Aitken 2006, Haegi 2022). The State Herbarium was established as 'a separate department' of the Garden in November 1954 (Board of Governors 1955). Paul was the Herbarium's first appointment to the position of Botanist. His fellow staff members at the time were few. Between November 1955 and June 1956 its Acting Keeper E.S. (Ted) Booth had made way

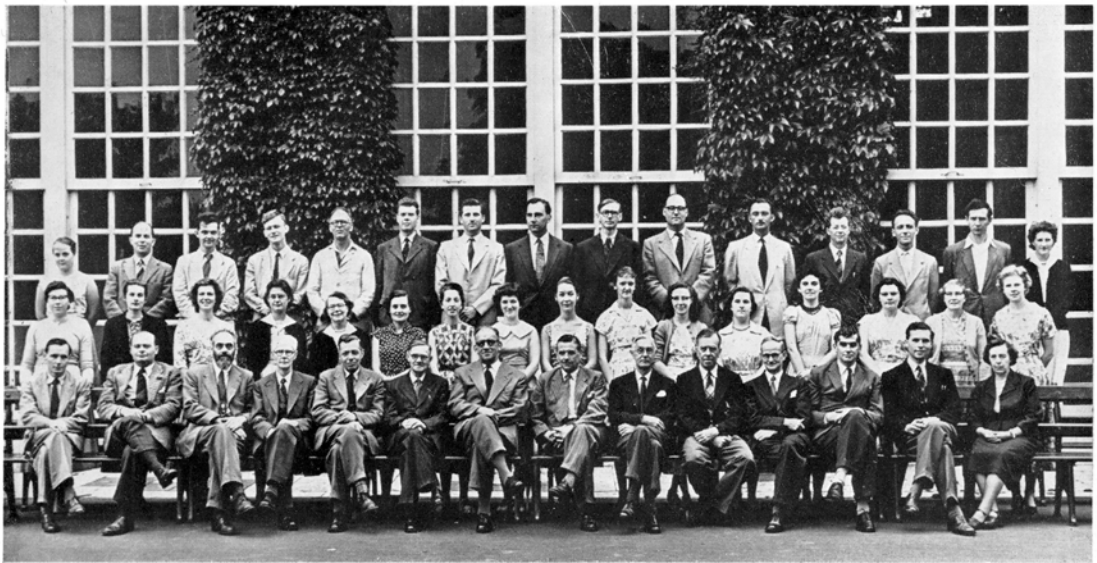


Figure 1. Staff of the Herbarium, Royal Botanic Gardens, Kew (K), 1957, from *The Journal of The Kew Guild*, 7: 488 (1958), reproduced with permission. Paul is second from right in the back row.

Front Row: R.D. Meikle, R.A.H. Graham, Dr. R.W.G. Dennis, E. Nelmes, A.A. Bullock, V.S. Summerhayes, Dr. N.L. Bor, Dr. G. Taylor, N.Y. Sandwith, E. Milne-Redhead, H.M. Marshall, J.P.M. Brennan, F.N. Hepper, Miss C.I. Dickinson. *Centre Row:* Miss J. Bowden, Miss D.M. Jepson, Miss B.G. Willoughby, Miss J.E. Hawkins, Miss M.I. Skan, Miss S.S. Hooper, Miss A. James, Miss D. Moscoff, Mrs C.J. Ovenden-Roberts, Miss A. Dunk, Miss P. Halliday, Miss J. McEwan, Miss L. Fletcher, Mrs O. Tate, Mrs H. Wootton, Miss B. Youngman. *Back Row:* Miss P.Z. Scammell, J.L. Gilbert, Dr D.H. Dalby, K.J. Churches, J.B. Gillett, N. Robson, J. Kennedy-O'Byrne, J.R. Tennant, R.A. Blakelock, D.A. Reid, S.G. Harrison, Dr. R. Melville, L.L. Forman, **P. Wilson**, Mrs I. Hitt.

for its first appointments: the Keeper Hansjörg Eichler, who proved a strong advocate for science and plant taxonomy and a world-class herbarium, his Secretary E.A. Riddoch ('Mrs Riddoch'), and Botanical Assistant David Whibley, (Board of Governors 1956). Joining the staff a couple of months before Paul was Botanical Assistant Eric Jackson. Skilled volunteers at the time were E.H. Ising, an 'honorary collaborator' working on the taxonomy of *Bassia* All. (= *Sclerolaena* R.Br. (Chenopodiaceae)), and Marlies Eichler, who assisted Hansjörg particularly in typing and collating taxonomic documents. Two more Botanical Assistants were appointed in 1961: Nik Donner and Vilja Jaegermann. A second Botanist, Rex Kuchel, joined in April 1962 (Wilson 1962), but in a few years left to become the Botanic Garden's Superintendent. From March 1961 Elizabeth ('Betsy') Shaw worked in the Herbarium on her PhD on Australian genera of Brassicaceae. On completion of her PhD in 1965 Betsy was

appointed a Botanist, subsequently resigning on 5 May 1967 to take up a research position at the Gray Herbarium (GH) at Harvard University in the USA.

Paul participated in the rapid growth of the State Herbarium collections to a size commensurate with its research and advisory functions. Acquisitions had commenced with a chronology of dispersed, loaned or donated, personal and institutional collections added to the few small special collections, including the invaluable J.M. Black Herbarium (Eardley 1947, Robertson 1986). A major drive for new plant collections was aimed at sources within and outside the Herbarium. As well as encouraging existing collectors, Eichler was a master at encouraging those passionate about plants to collect, rewarding them with a personal collector's book if they met his rigorous standards. The Herbarium embarked on a programme of collecting expeditions that extended throughout

the State, and across borders. Collection of duplicates was encouraged, resulting in a lucrative exchange programme with Australian and overseas herbaria. The minimal ecological and morphological information accompanying the collections of that time, including Paul's (Figure 2), result from the strategy to maximise the numbers and floristic and regional coverage of the State Herbarium collection by condoning a bare minimum of note taking.

In his time at the State Herbarium of South Australia Paul contributed 3556 collections during field work from the southeast corner of South Australia to its far western borders, into the Northern Territory and in southwest Western Australia (Figure 3). Paul's first Australian collection was of *Epacris impressa* Labill. from Mt Lofty, collected on 24 August 1958, as part of a field trip for the annual *Australian and New Zealand Association for the Advancement of Science* (ANZAAS) conference, held in Adelaide that year. What better way was there for Paul and many of the nation's plant taxonomists to become acquainted? Fellow participants who collected on the trip that day to a mallee heath region favoured by botanists, 'Chaunceys Line', across the ranges from Adelaide, were David Whibley of the State Herbarium of South Australia, John Green from the University of New England (much later head

of the Western Australian Herbarium), and Stan Blake of the Queensland Herbarium (BRI).

Ornithologist and botanist Richard (Dick) Schodde was one of two students who had been engaged at the State Herbarium of South Australia in 1956 as temporary assistants. The new Herbarium had accelerated Dick's plant collecting pursuits and he continued to volunteer in Herbarium activities; he recalls Paul's help in his B.Sc. (Hons.) project revising *Millotia* Cass. (Asteraceae, tribe Gnaphalieae), completed and published a few years later (Schodde 1963):

I found him quiet and studious, conscientious in his work, and easy enough to talk to but still with that English reserve. Before a collecting trip to upper Eyre Peninsula in October 19[5]8 or 19[5]9, I recall asking him to look out for Millotia macrocarpa, then still known only from one or two very poor collections – and he delivered in spades.

Paul made 16 collections of *Millotia* from September to December 1958, discovering two populations of *M. macrocarpa* Schodde in the remote Lake Gairdner region (Figure 3). In his first four months collecting to mid-December 1958, he made 1027 collections and engaged in botanical forays widely across the State.

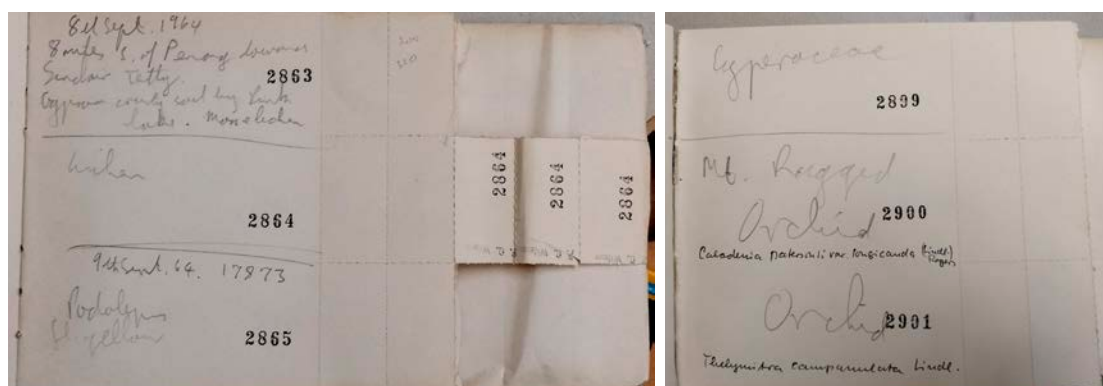


Figure 2. Pages from two of Paul Wilson's 12 field books held at the State Herbarium of South Australia, pertaining to collections at Penong, Eyre Peninsula and Mt Ragged on a trip to Western Australia in September 1964. Extended to the right of the minimal space for localities and notes were labels with perforated edges for insertion in duplicate sheets during pressing, the outer three with pre-stamped numbers on labels, the inner blanks available for use with any collection. A location was entered at the first collection, the last number was ruled off for a new collection locality to be entered at the next number; a new date of collection was entered with the first collection of a day, with a double line ruling off the last of the day. '17873' is a vehicle odometer reading. The inked identifications were entered back at the herbarium. Images: W.R. (Bill) Barker.

Paul's last trip with the State Herbarium of South Australia was over the border, a fortnight with Rex Kuchel in southwest Western Australia in September 1964. Paul also made an additional 32 collections of bryophytes and lichens and two vascular plants from the Florentine Valley and Mt Field areas in Tasmania on 21 August 1965, likely on a family holiday. Similarly, a single collection of *Gamochaeta purpurea* (L.) Cabrera (Asteraceae, tribe Gnaphalieae) was made during a visit to urban Canberra in the Australian Capital Territory on 21 January 1964.

Paul engaged with the community, too. Murray Fagg, long-time staff member at the Australian National Botanic Gardens in Canberra, was an active young member of the Field Naturalists' Society of South Australia at the time. He has fond memories of Paul:

I first met Paul Wilson in Adelaide on 14 April 1962. I was a 3rd year High School student and the youngest member of the Field Naturalists' Botany Club. We had an 'excursion' to the State

Herbarium of South Australia on that Saturday and Paul had ridden his bike in to show us around. He explained that he was 'acting Keeper' in the absence of Hansjörg Eichler who was in Kew as Australian Botanical Liaison Officer (ABLO).

I was so impressed with Paul's tour and description of the Herbarium's role that I rode my bike to the Herbarium the next Friday after school and asked Paul if I could work there during the school holidays. A few weeks later, with almost no paperwork, I started working regular office hours during the May holidays under Paul's gentle supervision and again in the September school holidays. By the time of the Christmas vacation Hansjörg Eichler had returned from Kew, and I continued working there during all holidays for the rest of my high-schooling.

Horticultural trainee/apprentices from the Botanic Gardens were in and out of the building and I think Paul also gave them lectures as part of their course.

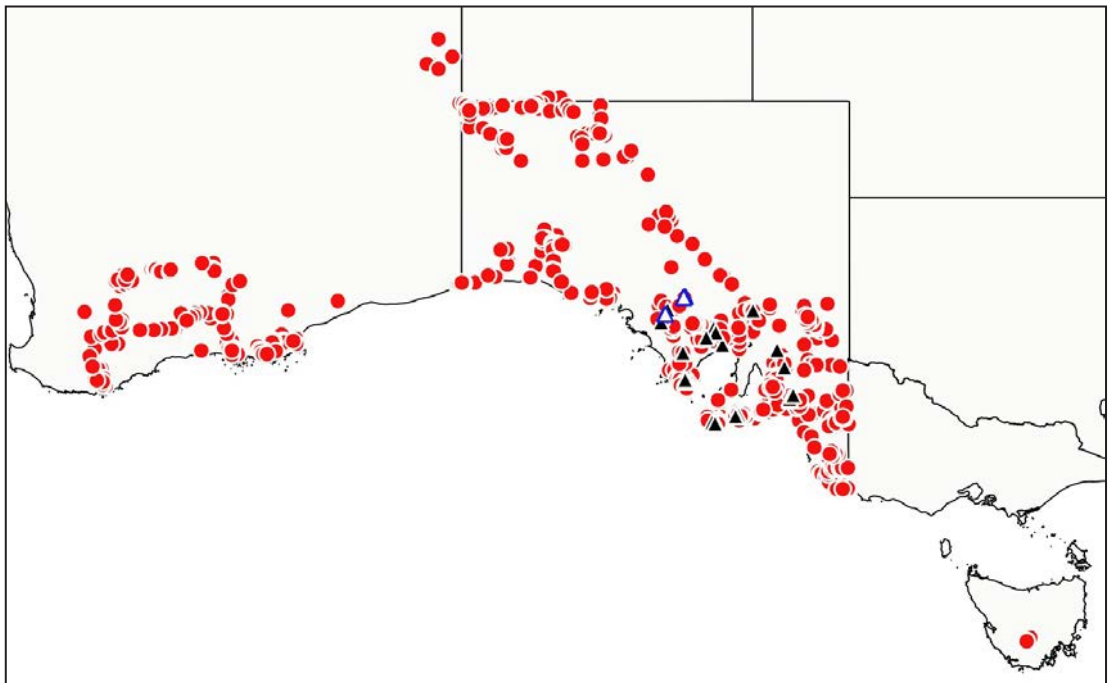


Figure 3. Specimens recorded in Australia's Virtual Herbarium made by Paul G. Wilson for the State Herbarium of South Australia between 24 August 1958 and 23 September 1964 (excluding *Wilson 2806*). Black triangles are 16 *Millotia* collections made in late 1958 for Dick Schodde, open blue triangles two collections of *M. macrocarpa*. Produced using QGIS by W.R. Barker with data modified from a download from the Australasian Virtual Herbarium on 20 Nov. 2024.

Everyone liked Paul. He seemed to have a smoother working relationship with Botanic Gardens Director Noel Lothian than Hansjörg Eichler had, and Lothian often joined us at morning tea.

I remember sitting in on later discussions with Hansjörg and Paul over the design of the future building of the new purpose-built SA Herbarium which opened in July 1966.

Paul was very influential in shaping my future career in botany, but also in shaping my outlook on life. I always thought of him as the ultimate 'gentleman' in every sense of the word.

Along with field work, Paul was productively engaged in his studies of Australian plant groups. On his arrival, Paul continued his research in *Correa* Andrews (Rutaceae), a diverse and taxonomically problematic genus in South Australia, which he had commenced studying while still at Kew in 1957 (Wilson 1961), along with the *Helipterum albicans* A.Cunn. (now *Leucochrysum albicans* (A.Cunn.) Paul G.Wilson) (Asteraceae, tribe Gnaphalieae) complex (Wilson 1960), thus setting in train his investigations of two of the main families that would come to define Paul's research career (see also Underwood 2011). Paul commenced a M.Sc. at the University of Adelaide in 1962–3 on a further three genera of Rutaceae, *Crowea* Sm., *Eriostemon* Sm. and *Phebalium* Vent., that was later completed in Perth (Wilson 1968, 1970; Board of Governors 1969). Bill Barker notes that while Paul thanked Eichler for his mentorship over the years in his thesis, Paul's approach to his research project was in the Kew style, notably in the formal citation of mainly nomenclatural synonyms. Bill Barker recalls that during his third undergraduate year in 1968, Paul delivered a Department of Botany taxonomic seminar while on a visit from Perth (possibly to submit his completed thesis), on generic delimitations in the Rutaceae.

Paul's skills and knowledge were valued more widely both in his institution and nationally. He took up the role of Acting Keeper of the State Herbarium in 1961–1962 when Hansjörg Eichler worked at Kew as the ABLO, which extended to a total of 15 months away, to investigate taxonomic

issues in the South Australian flora (George 2023); activities contributing significantly to the *Supplement to J.M. Black's Flora of South Australia* (Eichler 1965). As a result of his annual attendance at meetings of ANZAAS along with other Botanic Gardens and State Herbarium staff, Paul was appointed to the ANZAAS Australian Systematic Botany Committee in 1960 as a member. He became the secretary in the following year and was still in the role in 1964 (Board of Governors 1965). Paul was central to a brief reincarnation of the bi-annual *Australasian Herbarium News*, 'a journal for the interchange of ideas among systematic botanists of Australia and New Zealand' that had been produced for the Committee and edited by its Secretary for 14 issues (1947–1954). In 1962 Paul produced a single 'Systematic Botany News-Sheet' in the *Australian Journal of Science*, the monthly journal of ANZAAS (Wilson 1962). This compilation of news from several herbaria is preceded by a discussion of the varying roles of Australia's Federal, State and University herbaria and the incidence of incorrectly applied names in published works. Paul promoted the need for training of taxonomic botanists and refereeing of publications by experienced taxonomists and called for institutions to establish an annual travel program for taxonomists to visit herbaria to discuss problems, absorb new ideas, and engage with fellow taxonomists. In his time in Adelaide, Paul not only attended ANZAAS annually but also made visits to herbaria in other states. These views proved a forerunner to his roles in national bodies that set directions in Australian plant systematics.

After some years of lobbying the South Australian Government, a new State Herbarium building was completed in October 1965 (Robertson 1986) with 200,000 collections assembled. Ironically, considering his involvement in its long gestation, Paul left before the building was occupied, making collections on his transit to Perth in September 1965 to take up the position of Botanist in the Western Australian Herbarium. His new position attracted a higher salary than in Adelaide, a fact used in an ongoing campaign by the Keeper, Director and Board for better salary levels and career scales to retain and recruit staff (e.g., Board of Governors 1967).

The Wilson family enjoyed their time in Adelaide, with family camping holidays in their VW Kombi van at places such as Clare and further afield into arid country to combine with plant collecting as part of Paul's role at the State Herbarium. During a collecting trip close to Woomera, Paul was detained for a short time on suspicion of spying. Weapons testing at the nearby experimental facility made local officials jumpy and they could not envisage anyone being in the area just for the plants.

Perth: a memorable endeavour (1965–2017)

After almost seven years at the State Herbarium of South Australia, Paul was appointed as Botanist at the Western Australian Herbarium on 14 October 1965. Paul would remain at the Western Australian Herbarium for the remainder of his working life, followed by an extensive term as a Research Associate.

When the Wilson family arrived in Perth, Quakers Nancy and Laurie Wilkinson kindly gave up their house in Mt Lawley to the family until they found their own home. The Wilsons had a farm in Woorooloo, which became a regular weekend destination for many years. The girls (and later Annemarie, the young daughter of Paul and second wife Margaret) rode the horses and mustered sheep and cattle, while Paul was happy to potter with fencing and making cocky gates, and any other tasks that needing doing.

Paul was an active member of the Mt Lawley Quaker Meeting until the late 1980s. Originally, he took on various roles and started the monthly newsletter. The contemplative quiet Meeting time was probably a sanctuary from life buzzing with adolescent girls at home. The family had since settled in the Perth suburb of Como which was a good walking distance from the Herbarium in the nearby suburb of Kensington. Paul and Jenny later parted ways in 1982.



Figure 4. Transferring the collections of the Western Australian Herbarium from a building on the Western Australian Department of Agriculture site in Kensington to the purpose-built Herbarium building (constructed 1970, demolished 2023) on the same site. L to R: Paul Wilson, Ted Aplin, Bob Saffrey, Keith Allen, Ian Brooker, c. 1970. Image: Alex George.

Life at the Western Australian Herbarium was as busy and productive for Paul as in Adelaide. Paul's research interests continued to focus on the Rutaceae and the tribe Gnaphalieae of the Asteraceae, but broadened to include one of the more taxonomically challenging and ecologically important groups in the Australian flora, the Chenopodiaceae. Perhaps reflecting Paul's fascination with arid Australia, he soon became the undisputed authority on this important group of plants, although Paul would rarely seek or claim such authority (or any form of personal recognition) for his considerable knowledge and efforts. The honouring of Paul in the epithet of *Tecticornia indefessa* K.A.Sheph. by fellow Chenopodiaceae specialist and Western Australian Herbarium colleague Kelly Shepherd is testament to Paul's tireless commitment to this taxonomically complex group:

The specific epithet is derived from the Latin *indefessus* (unworn, indefatigable), in recognition of the tireless work of Paul G. Wilson (1928–) who has contributed so much to

the taxonomy of the Australia flora and who has freely shared his knowledge (and love) of the Australian samphires. (Shepherd 2007).

Paul published revisions of several taxa within the Chenopodiaceae during the 1970s and 1980s, culminating in the *Flora of Australia* treatment of the family in 1984 (Wilson 1984). Among these was a famously intractable group of plants, the samphires, at that time comprising *Sarcocornia* A.J.Scott (= *Salicornia* L.) and *Tecticornia* Hook.f., as well as *Halosarcia* Paul G.Wilson, *Pachycornia* Hook.f., *Sclerostegia* Paul G.Wilson and *Tegicornia* Paul G.Wilson, which were later subsumed into *Tecticornia* (Shepherd & Wilson 2007). Not only difficult to collect and preserve, but also occurring in often inhospitable, uninviting habitats, samphires possess a cryptic and seemingly uniform morphology, masking a complexity reflective of a rich taxonomic diversity. There are few vascular plant groups so superficially unattractive in a flora otherwise rich in 'pretty' plants that required such critical taxonomic study. Brendan Lepschi recalls Greg Keighery joking that Paul identified samphire



Figure 5. Samphire enthusiasts Paul Wilson and Kelly Shepherd, at the new Western Australian Herbarium building, Dick Perry Ave, Kensington, Perth, c. 2018. Image: Juliet Wege

taxa 'completely by sense of smell', in reference to Paul's habit of closely examining specimens under a hand lens by holding the specimen close to his face. This attribution of a keen sense of smell would have appealed to Paul's great sense of humour; however, the joke is on Greg, as Paul believed formaldehyde exposure during his time working in the anatomy section at Guys Hospital had unfortunately left him with impaired olfactory function.

A samphire also featured prominently on a Christmas card drawn by Margaret Wilson, sent to Brendan Lepschi and Terena Lally in 1998, which featured a carefully rendered *Tecticornia* with an unmistakable caricature of Paul atop the 'tree' as the Christmas tree angel (Figure 6)! Paul's characterful image also appears elsewhere, in the pages of the children's book illustrated by Margaret Wilson, *Sun, Sea, Crab and Me* (Gray 1993).

Paul's careful taxonomic eye, pragmatic nature and dedication is evident not only in his revision of this and other groups. Fellow samphire enthusiast Kelly Shepherd reflects on Paul's legacy:

Paul Wilson was very much respected by his peers. Years after his (second) retirement international colleagues were still asking after him. Like me, many had well-thumbed reprints of his various publications annotated with '[w] arm regards, Paul Wilson' scrawled in the corner. It is difficult to summarise the impact of Paul's work. His revision on the Australian samphires must have been a daunting task, considering the continental distribution of the group, the tangled taxonomic history, and the challenge of applying poorly understood Australian taxon concepts within a globally complex tribe. In his first publication on the group (Wilson 1972) he noted "[t]he delimitation of genera within this tribe is notoriously difficult and, as far as

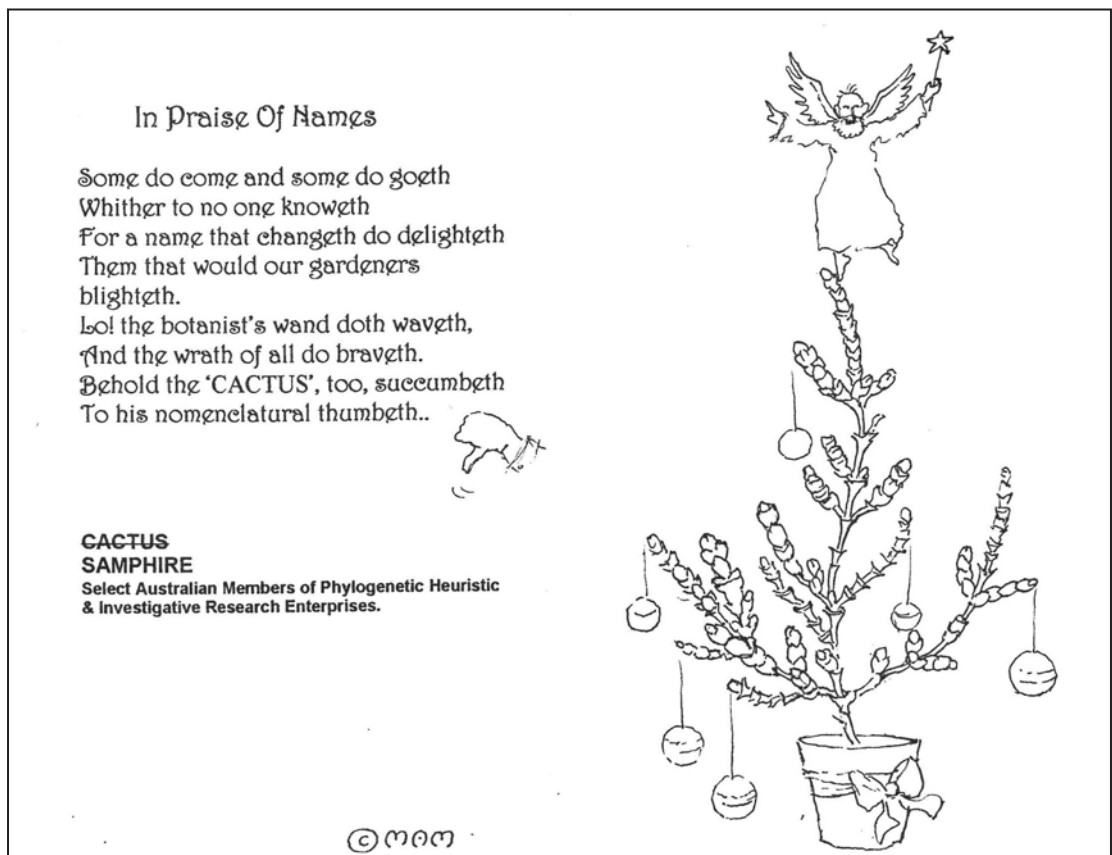


Figure 6. Christmas card designed by Margaret and Paul Wilson, featuring Margaret's illustration, December 1998. 'CACTUS' referred to 'Combined Australian Capital Territory Urban Systematists', from a Christmas card designed by Lyn Craven (Australian National Herbarium).

Australian plants are concerned, the available generic names have been somewhat haphazardly applied by different authors... descriptions of supposedly diagnostic characters, which have been provided by various authors, are so general as to encompass several genera, or so incorrect as to render them useless". No one else could have taken on such a group and made the progress he did in such a short amount of time. In continuing his work on the Australian samphires, I am forever grateful for the solid foundations he built. More than once, I have thought I've made a 'novel' discovery, only to find a brief note buried somewhere in his treatment citing an unusual specimen that coincided with my 'new' taxon concept, or there would be an 'aff' or draft name in his

handwriting ghosting across a specimen sheet to show, yet again, Paul was still one step ahead of me leading the way.

Paul was also very aware of the limitations of his own work, and it was noted in the introduction of his Flora of Australia treatment that "[d]etailed study is still needed, however, to solve some problems in the family". Paul would often state that some of his generic concepts were problematic and welcomed further work being undertaken, accepting proposed changes with good humour. For example, he graciously collaborated with me to synonymise genera following outcomes from my PhD research, although he used to gently tease me about it and introduced me to others as "the girl who



Figure 7. Jim Willis (National Herbarium of Victoria), Paul Wilson and Gerhard Benl (Staatliche Naturwissenschaftliche Sammlungen Bayerns), examining *Roycea* C.A.Gardner (Chenopodiaceae), Mortlock River, Meckering, WA, 5 October 1977. Image: Alex George.

got rid of four of my genera". Similarly, he would mention to me his concerns about the validity of some of his genera within the *Maireana*/*Sclerolaena* complex, which we are still trying to resolve 40 years later.

I and countless others are grateful for Paul's tireless work through his long and productive career, which has left us with a very rich inheritance indeed.

Significantly, much of Paul's published research stands as the first comprehensive revisions of particular groups in the modern (post-WWII) era. Prior to Paul's revisions of several genera in the Australian Gnaphalieae tribe in the Asteraceae, Rutaceae and of course the Chenopodiaceae, existing treatments were largely those of major 19th Century authors such as George Bentham or Ferdinand von Mueller, or scattered regional treatments in State floras or similar works. Many of Paul's taxonomic concepts stand today, while others have been refined and modified by subsequent researchers, with access to new, or improved techniques both in data collection and analysis, along with significantly greater number of specimens available for study.

According to records from the Australian Plant Name Index (<https://biodiversity.org.au/nsl/services/search/names>; accessed 20th August 2024), Paul was involved in providing names for 282 new taxa and in changing the name and/or status of a further 400 taxa, within the Asteraceae, Chenopodiaceae and Rutaceae. Paul published 81 scientific papers and articles during his lifetime, the majority concerning his research interests in the Asteraceae, Chenopodiaceae and Rutaceae, including significant taxonomic and systematic contributions (e.g. Al-Turki *et al.* 2003; Schmidt-Lebuhn *et al.* 2015; Shepherd & Wilson 2007; Wilson 1970, 1980, 1983, 1992a-d, 2016), as well as numerous other taxonomic revisionary studies, nomenclatural papers (frequently at the request of co-authors who sought Paul's advice to resolve these issues, e.g. Maslin & Wilson 2007; Lally & Wilson 2008), and works on Western Australian mangroves (Kenneally *et al.* 1978) and aspects of botanical history in Western Australia (Wilson 1988). Paul also produced 14 book chapters or other contributions, ranging from flora treatments

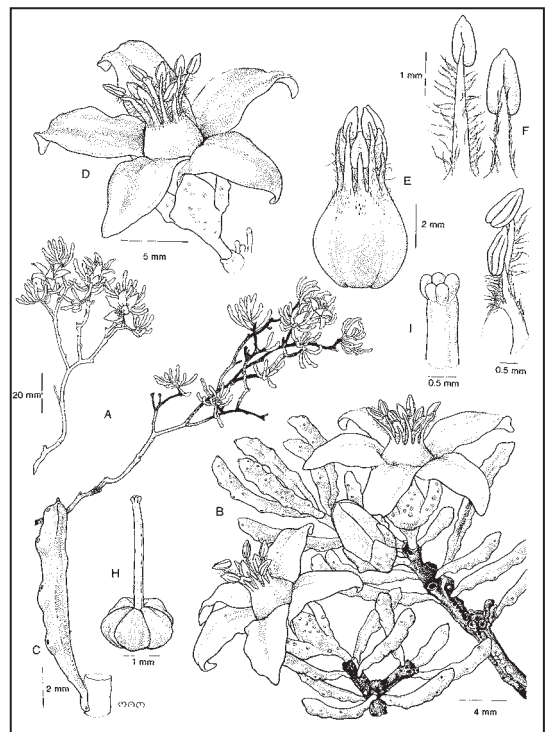


Figure 8. *Philothea citrina* Paul G. Wilson. Black and white line drawing by Margaret Wilson (see Wilson 1992f).

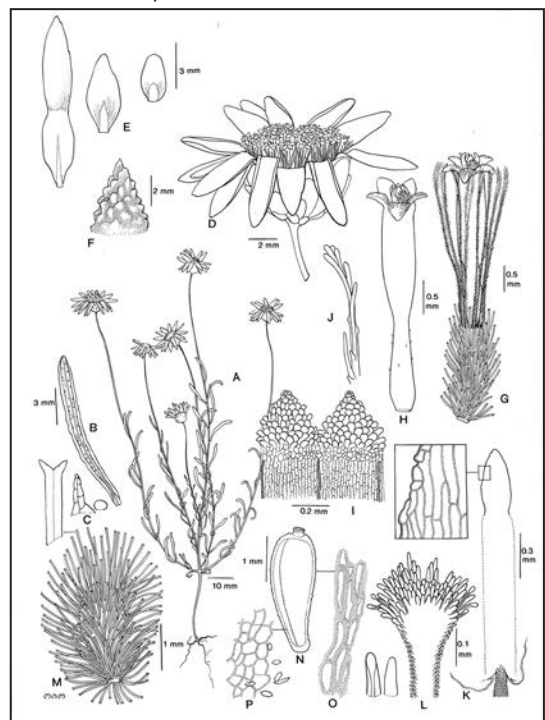


Figure 9. *Rhodanthe collina* Paul G. Wilson. Black and white line drawing by Margaret Wilson (see Wilson 1992a).

and other studies on his study groups (e.g. Wilson 1981, 1984, 1992e, Wilson & Wilson 2006) to the Western Australian flora more generally (e.g. Wilson 1971, 1972, Semeniuk *et al.* 1978, Aplin & Wilson 1988, 1989). A remarkably productive output, especially when considering the diversity and number of taxa involved in some of Paul's chosen study taxa, such as the Asteraceae and especially the Chenopodiaceae.

The major focus of Paul's taxonomic research concerned taxa with continental distributions, reflecting his strong interest and commitment to systematic botany in an Australian, rather than strictly state-based, context.

Field work in the West

With his move to the Western Australian Herbarium, including a handful of collections

made en route from Adelaide, Paul continued amassing collections, characteristic of his working life. As with his arrival in Adelaide, Paul marked his joining the Western Australian Herbarium with productive field work. On 15 October, just one day after his official appointment, he made 68 collections west of Collie, while a fortnight later he was 170 km north of Perth at Badgingarra where he collected 119 specimens. Over the ensuing 39 years, Paul would collect a further 9382 specimens. His last collection, number 13,078, a gnaphalioid daisy, *Rhetinocarpha suffruticosa* (Benth.) Paul G. Wilson & M.A. Wilson, collected with Margaret Wilson from near Badgingarra (c. 200 km north of Perth), was made when he was a Research Associate of the Herbarium, on the 8 December 2004. A map of all Paul's collections is presented in Figure 10. Paul's collections, the earlier ones frequently with Paul's distinctive handwriting, will be familiar to any taxonomist who has worked

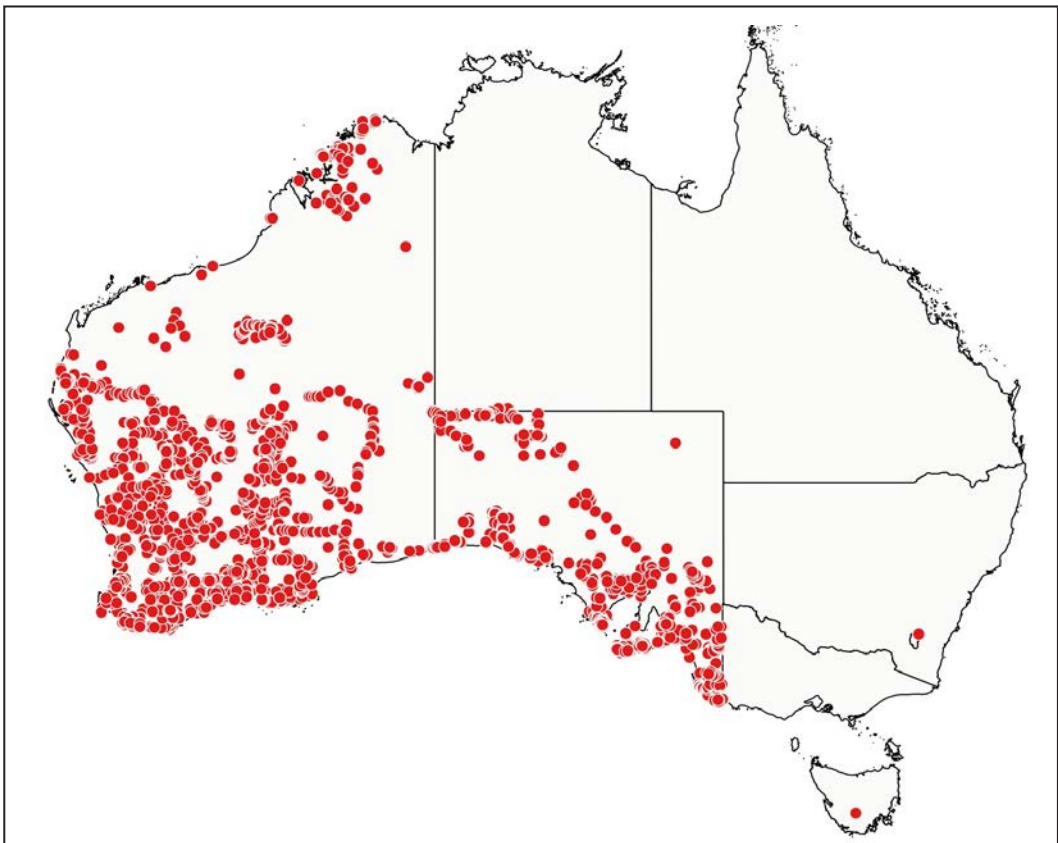


Figure 10. Collections recorded in Australia's Virtual Herbarium made by Paul G. Wilson for the State Herbarium of South Australia and the Western Australian Herbarium collections between 24 August 1958 and 8 December 2004. Image produced by W.R. Barker using QGIS with data modified from a download from the Australasian Virtual Herbarium on 20 Nov. 2024.

on the Australian flora, especially from the arid zone or Western Australia. Perhaps reflecting his early experience in Adelaide, label data is generally scant, but informative and accurate. Paul collected widely, both geographically as well as taxonomically, although, as would be expected, vascular plant groups the subject of his research predominate. As mentioned previously, Paul had a particular fascination with the Australian arid zone, and accordingly many collections are from this region.

In his 28 years at PERTH as a salaried botanist, Paul's field work included targeted trips focusing on his research interests in Chenopodiaceae, Asteraceae and Rutaceae, botanical surveys initiated by the State herbarium or other institutions, and field trips in the company of visiting botanists from interstate and overseas herbaria. There were also long periods where Paul remained at the Herbarium, focusing on his research and its publication. From 1965 to 1973, Paul made 5915 collections, after which he spent the next decade working mainly in the herbarium, a period in which he produced 12 papers and which culminated in the treatment of the

Chenopodiaceae for the *Flora of Australia* (Wilson 1984). In 1984 he returned to doing field work, and in the next five years he made a further 1110 collections, before again focusing on herbarium research and publishing another 14 papers before his official retirement in 1993.

1968 was perhaps Paul's busiest year for field work. He made 1736 collections, over five major field trips. The first two trips were to Kalbarri and the central wheatbelt (March) and Lake King (early August), followed by three more significant excursions. In August to early September he accompanied Kings Park and Botanic Garden Director John Beard, on an expedition to the Eastern Goldfields and Nullarbor, where Paul made 561 collections, as part of Beard's extensive survey work as part of the Vegetation Survey of Western Australia (Beard 1972–1980 and 1974–1980). Paul is pictured as a 'scale marker' (as are so many other Western Australian botanists) in at least four images of vegetation communities taken by Beard in the course of his research (Figure 12). One of Paul's daughters recalled the excitement of this particular trip, which brought TV cameras to the Wilson house to film the setting out.



Figure 11. John Beard (left) and Paul Wilson, during the Vegetation Survey of Western Australia, 1968. Image: Herbert Demarz.



Figure 12. Paul Wilson, during the Vegetation Survey of Western Australia, 1968. Image: Alex George.

His final trip in 1968 was to the Esperance region, with members of staff from the State Herbarium of South Australia. Paul made 440 collections over his nine days in the region. Tony Orchard, then at the State Herbarium of South Australia, also participated in the trip:

Hansjörg Eichler had heard of the large-scale clearing that was occurring around the Esperance region of Western Australia and was very concerned that, given the well documented fact that this area was a hot spot of plant biodiversity, many species could be lost before they were ever recognised, and that the known ranges of many more would be severely curtailed. He could do nothing to halt the clearing, but determined that at the very least someone should at least document what was there before it disappeared.

There seemed to be little or no action forthcoming from the WA Herbarium¹, so he decided to try to mount a small expedition from South Australia. The problem was that at that time all State herbaria were more or less

constrained to working only within their State boundaries, so he could not get permission to spend SA money on a WA problem. However, he did get permission to have leave for himself and some SA staff to do the work, but only if privately funded. He managed to find money from various sources, which remained largely confidential, although I believe they included his dentist, and perhaps one of his own staff, Eric Jackson.

The expedition ran over about 6 weeks and comprised Eichler, Eric Jackson, Nik Donner and myself (I don't remember anyone else, but there might have been). We had the use of a 4WD from SA and drove across the Nullarbor to Esperance. We were housed mainly in various shearers quarters, and ranged widely over the district, trying to collect only in areas designated for clearing, but in a few others nearby. Paul Wilson joined us from Perth for several days, as I understand it, in a private capacity. I think that was probably the first time I met him. I remember one (inconsequential) conversation we had when he revealed that he

was vegetarian because he didn't approve of killing animals – but he still wore leather shoes! This was pre-plastic days.

One of the ironies of this expedition is that we were obliged to get collecting permits for our work, and jump through all the usual hoops about minimal quantities and vouchers for PERTH, while the very large bulldozers were working, often a few metres away, clearing hundreds of acres of the same vegetation.

¹The activity of staff at the Western Australian Herbarium was probably constrained because it was under the authority of the Department of Agriculture, the agency responsible for the agricultural development in the wheatbelt,

including the Esperance region. However, Paul was accompanied on this trip by one of the PERTH technical staff, so he was collecting in an official capacity when he joined up with Eichler's party.

The following are some highlights of Paul's other field activities in Western Australia when he was employed at the Western Australian Herbarium.

1966: In March/April he accompanied Maisie Carr, then a visiting fellow at Queen's University, Belfast, on a *Eucalyptus* collecting trip to the Eastern Goldfields (near Menzies). In Spring (August to October) Paul also undertook general collecting in the southern wheatbelt and south coast regions of the State.



Figure 13. Paul Wilson, 139 km E of Carnarvon, WA, 29 May 1969. Image: unknown, possibly R.A. (Bob) Saffrey.

1969 and 1970: Undertook field work in connection with his study of Chenopodiaceae. In July and August of 1969 he collected mainly from Shark Bay to Carnarvon, travelling inland then south to Mount Magnet then along the eastern shore of Lake Moore to Jibberding at the southwestern extremity of the Arid Zone. In 1970 Paul again visited the Arid Zone, collecting between Koolyanobbing and Wiluna then west to Mt Narryer and south to Mullewa.

1971: General collecting was undertaken in the Rudall River area, c. 250 km ENE of Newman (August). Aerial transport to this remote, poorly collected area, and logistic support onsite, was provided by a mining company that was operating in the area. Alex George (May) and Bruce Maslin (September) also undertook similar, but separate trips in the same year.

1972 and 1973: Participated in a biological survey of the northwest Kimberley, in the general vicinity of the Bonaparte Archipelago (by boat). These excursions were part of a series of biological surveys of the Kimberley region coordinated by the W.A. Australian Wildlife Centre. Details of the 1972/73 trips are provided in Burbidge and McKenzie (1978). In September 1973 Paul undertook field work focused on Asteraceae in the Midwest region of southwest Western Australia.

1984–1988: Following a decade-long hiatus in collecting activity (1974–1983), Paul undertook substantial field work during the following five years. This included a trip (with Bruce Maslin and Terry Macfarlane) to the western deserts of Western Australia (September 1984), to collect chenopods and undertake general collecting. In September and October 1986, he undertook trips focused on collection of Asteraceae and Rutaceae from various parts of the wheatbelt. In 1987 he collected chenopods and other plants from north of Shark Bay and inland to Gascoyne Junction. In June 1988 he undertook what was to become his last major field excursion when he joined international colleagues (including Martin Sands) to complete a survey in the west Kimberley region in the vicinity of the Napier, Oscar and King Leopold (now Wunaamin Miliwundi) Ranges. This area was considered by the botanists and geographers planning the expedition in 1985 in London to be



Figure 14. Paul Wilson, at Cocklebiddy Cave, WA, January 1981. Image: Bruce Maslin.

effectively unexplored botanically. A report of this survey is given in Goudie and Sands (1989).

Apart from two apparently opportunistic collections of *Rosa rubiginosa* L. and *Isolepis platycarpa* (S.T.Blake) Soják made in the Australian Capital Territory in 1973 and 1976 respectively, the remainder of Paul's collecting activity from 1965 until 2004 was undertaken entirely in Western Australia.

National roles and commitments

Paul's early commitment to high taxonomic and nomenclatural standards in an Australia-wide approach continued in Perth, with his active involvement in many of the burgeoning initiatives of what would eventually become the Australian Biological Resource Study (ABRS), and several ABRS projects, such as the Flora of Australia. It is notable that apart from an early committee, mentioned below, he did not get involved with the ASBS, perhaps seeking to spend his energy closer to the decision makers. But he may also have felt, like some others with influence, that the Society was there for the developing taxonomists, a source of new talent and fresh ideas.

Paul was a member of the ABRS Interim Council as early as 1973, prior to the formal establishment of

ABRS in 1977 (George *et al.* 1999). He and Lawrie Johnson of the Royal Botanic Gardens, Sydney and the National Herbarium of New South Wales (NSW) were the two plant taxonomists on a visit by the Council to the State Herbarium of South Australia (Board of Governors 1976). He joined the ABRS Editorial Study Group in 1978 (after having been seconded to ABRS for approximately six months in 1976), to prepare guidelines for contributors to the forthcoming Flora. This group subsequently became the Flora of Australia Editorial Committee, and Paul was a member of this Committee from its foundation in 1980 until 1992, shortly before his retirement (Orchard 1999a). Paul also served as Chairman of an ASBS committee established at the Perth ANZAAS in 1973 that drafted guidelines for the 'Preparation of Botanical Taxonomic Papers' (Briggs *et al.* 1976).

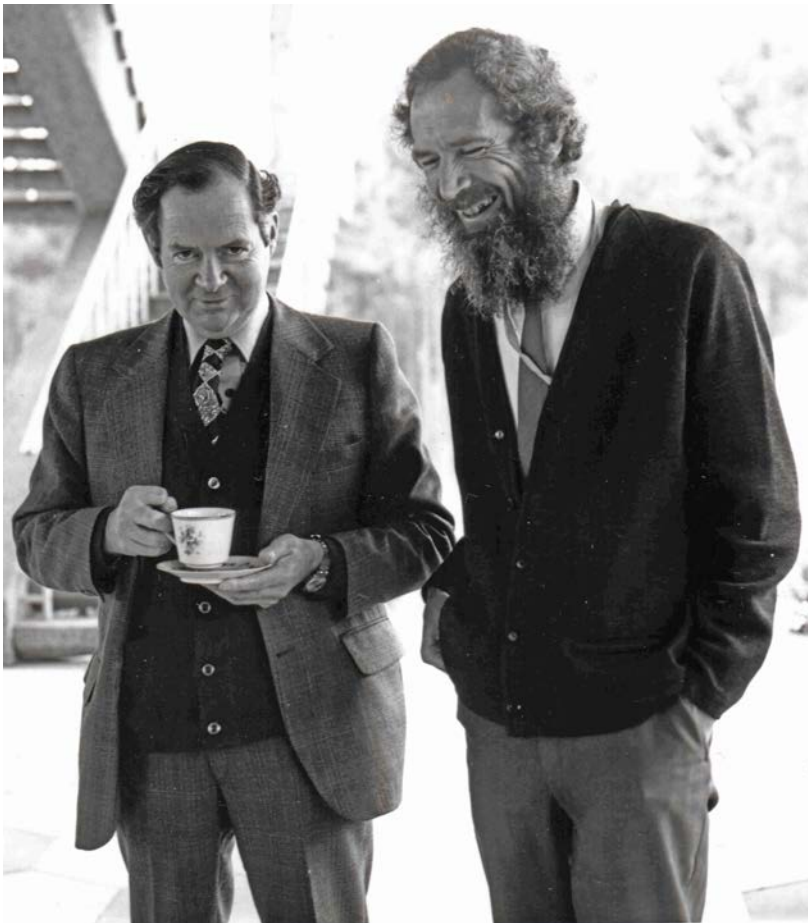


Figure 13. Arthur Court (National Herbarium of Victoria) and Paul Wilson, CHAH meeting, Perth, 1 October 1976. Image: Alex George.



Figure 15. Flora of Australia Editorial Committee Meeting, L to R: Les Pedley (Queensland Herbarium), Paul Wilson, Jim Ross (National Herbarium of Victoria), Barbara Briggs (National Herbarium of New South Wales), Bob Robertson (RSBS, Australian National University, Committee Chairman), Hansjörg Eichler (Australian National Herbarium), David Symon (Herbarium, Waite Agricultural Research Institute), Arthur Chapman and Alison McCusker (both Australian Biological Resources Study), Canberra, 12 – 13 March 1981. Image: Alex George.

Paul was also actively involved in other regional (State) and national taxonomic initiatives throughout his career, including membership of the following: the editorial committee of *Nuytsia*, the house journal of the Western Australian Herbarium; ASBS; the International Association of Plant Taxonomists (IAPT); and the Royal Society of Western Australia. Paul was also Acting Curator of the Western Australian Herbarium during the period between Bob Royce's retirement and John Green's appointment, during January to June 1975, but returned to his role as botanist rather than seeking a more senior (and more administratively-focused) role.

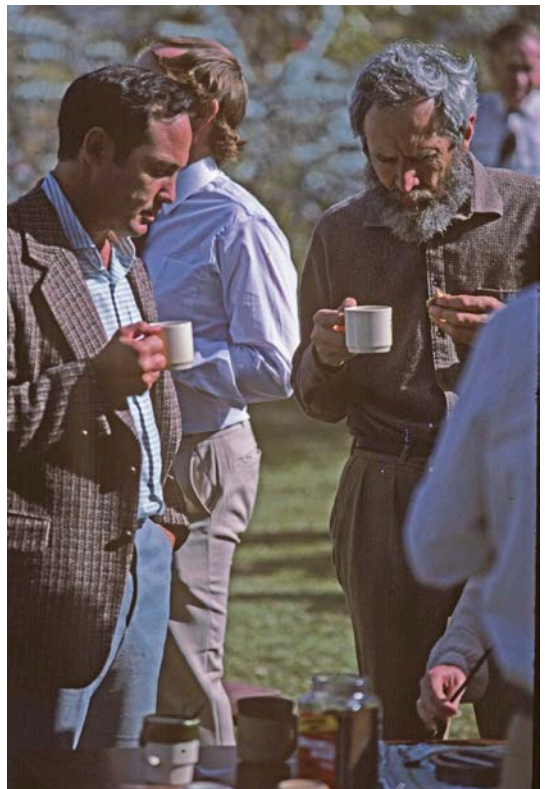


Figure 16. Clyde Dunlop (Northern Territory Herbarium) and Paul Wilson, Council of Heads of Australian Herbaria (CHAH) meeting, Perth, October 1984. Image: Bruce Maslin.

Impact, influence, and recognition

Recollections of Paul from those that knew him professionally invariably mention Paul's gentle nature, good humour and willingness to share his knowledge and assist others wherever possible (within reason). No matter how engrossed Paul was in a task at the Herbarium, he was always happy to down tools and offer assistance on all manner of queries, from Latin translation, to nomenclature, typification, aspects of historical botany and sundry other subjects. Paul was unfailingly kind, thoughtful and helpful, regardless of the query.

There would scarcely be a member of staff at the Western Australian Herbarium who did not, at some stage of their career, benefit from Paul's gentle wisdom and knowledge. Paul facilitated visits of interstate and international botanists to the Herbarium and Western Australia over many years, he assisted the agricultural community with expert weed and poison plant identifications and provided forensic identifications (primarily Cannabis) to the Western Australia Police Force. He freely provided advice on botanical Latin (preparing descriptions/diagnoses and translations), interpretation of the Code in its many permutations, plant identifications (thanks to a broad knowledge of flora in general, not only of Australian taxa; e.g. Wilson 1998), and botanical literature. Paul had a great love and knowledge of literature, and he assisted with annual library book and microfiche purchases at the Herbarium for many years.

Fittingly, issue 2 of volume 12 of the Western Australian Herbarium house journal *Nuytsia* was dedicated to Paul on the occasion of his 70th birthday in 1998 (Marchant 1998). At the time, Paul was the most prolific contributor to that journal, contributing to the first issue in 1970 and to the 12th volume in 1998.

Paul is also commemorated with (as at October 2024), eleven published plant names (Table 1). These honour not only Paul's contribution to taxonomy and systematics, but authors of these names often specifically acknowledge Paul's personable nature, enthusiasm, advice and encouragement in the etymology, something

rarely seen with such frequency in etymologies for commemorative epithets.

Table 1. Plant names honouring Paul Wilson.

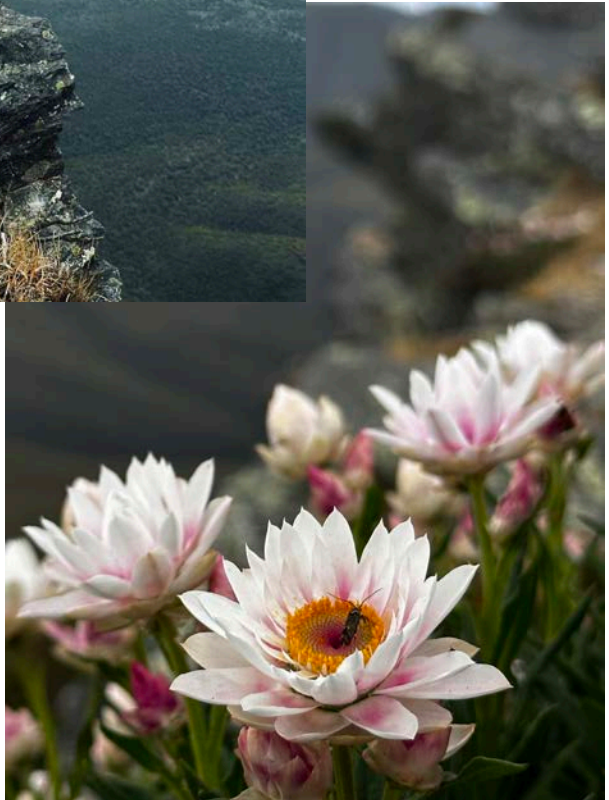
Amaranthaceae	<i>Ptilotus wilsonii</i> Benl
Asteraceae	<i>Podotheca wilsonii</i> P.S.Short <i>Xerochrysum wilsonii</i> T.L.Collins
Chenopodiaceae	<i>Sclerolaena wilsonii</i> (Ising) A.J.Scott [Basionym: <i>Bassia wilsonii</i> Ising] <i>Tecticornia indefessa</i> K.A.Sheph.
Fabaceae	<i>Acacia wilsonii</i> R.S.Cowan & Maslin
Lamiaceae	<i>Microcorys wilsoniana</i> B.J.Conn
Portulacaceae	<i>Calandrinia wilsonii</i> Obbens
Rhamnaceae	<i>Cryptandra wilsonii</i> Rye
Rutaceae	<i>Boronia citriodora</i> subsp. <i>paulwilsonii</i> Duretto <i>Drummondita wilsonii</i> Mollemans <i>Nematolepis wilsonii</i> (N.G.Walsh & Albr. Paul G.Wilson) [Basionym: <i>Phebalium wilsonii</i> N.G.Walsh & Albr.]

A botanical partnership

Many of Paul's publications are illustrated by the incredibly fine and beautiful line drawings, or occasionally coloured plates, prepared by Margaret Wilson (formerly Menadue) whom he married in 1990. Born in Melbourne, Margaret relocated to the USA in the 1960s, where she was introduced to scientific illustration via a short course at Cornell University. Following this, she spent from 1966 to 1970 illustrating taxonomic characters for *The Moths of America, North of Mexico* (Hodges 1971, onwards). She subsequently moved to West Berlin and in 1973 completed colour paintings of tropical fish for



Xerochrysum wilsonii T.L.Collins,
named in honour of Paul G Wilson.
Image: Patricia Chan, [https://
www.inaturalist.org/observa-
tions/190963284](https://www.inaturalist.org/observations/190963284)



the Institut für Meereskunde an der Universität Kiel. Margaret's professional association with Paul dates from 1974 when on a visit to Western Australia from her then home in West Berlin she showed Bob Royce (Curator of the Western Australian Herbarium) and Paul a pen and ink sketch of *Hemiandra pungens*, her first-ever illustration of an Australian plant (it was never published). Unfortunately, there was no funding for a botanical illustrator at the Herbarium at that time and Margaret returned to West Berlin, after which Paul maintained a correspondence with Margaret, promising to let her know if any illustration work came up in Perth.

Margaret returned to Australia in the late 1970's to undertake artwork for Mangroves of Western Australia (Semeniuk *et al.* 1978). She then commenced working on illustrations for Flora of the Perth Region (Marchant *et al.* (1987). Under Paul's guidance Margaret produced all the black and white drawings, and the watercolour painting for the cover for that Flora. It was always Margaret's preference to work from living material and Paul normally helped to source this material. The Perth Flora was the first of many very enjoyable and productive collaborations between the two of them, with Margaret either working in Paul's office or from home. These included contributions published under the

auspices of:

1. The Australian Biological Resources Study: *Flora of Australia* (vol. 4, Chenopodiaceae; vol. 26, Rutaceae; vol. 37, Asteraceae 1, and the as-yet unpublished vol. 38, Asteraceae 2) and *Plant Indumentum, a Handbook of Terminology* (Hewson 1988).

2. The Department of Conservation & Land Management (now Department of Biodiversity, Conservation & Attractions): research papers in *Nuytsia* authored by Paul and other botanists, *Broome and Beyond* (Kenneally *et al.* 1996) and two booklets on the vegetation of Western Australian freshwater rivers and creeks,

estuaries and saline waterways (Chalmers & Wheeler 1997).

3. The Western Australian Naturalist's Club: *Mangroves of Western Australia* (Semeniuk *et al.* 1978).

Much of Margaret's original artwork is deposited at the Library of the Department of Biodiversity, Conservation and Attractions in Perth.

Two of Paul's daughters, Bryony (Paul's third daughter by his first marriage) and Annemarie (Paul and Margaret's daughter) are also talented artists, and have produced illustrations for some of Paul's papers in *Nuytsia* and the *Flora of Australia*.



Figure 17. *Halosarcia peltata* Paul G.Wilson (= *Tecticornia peltata* (Paul G.Wilson) K.A.Sheph. & Paul G.Wilson). Colour illustration by Margaret Wilson, prepared for the cover of volume 4 of the *Flora of Australia* (George 1984).

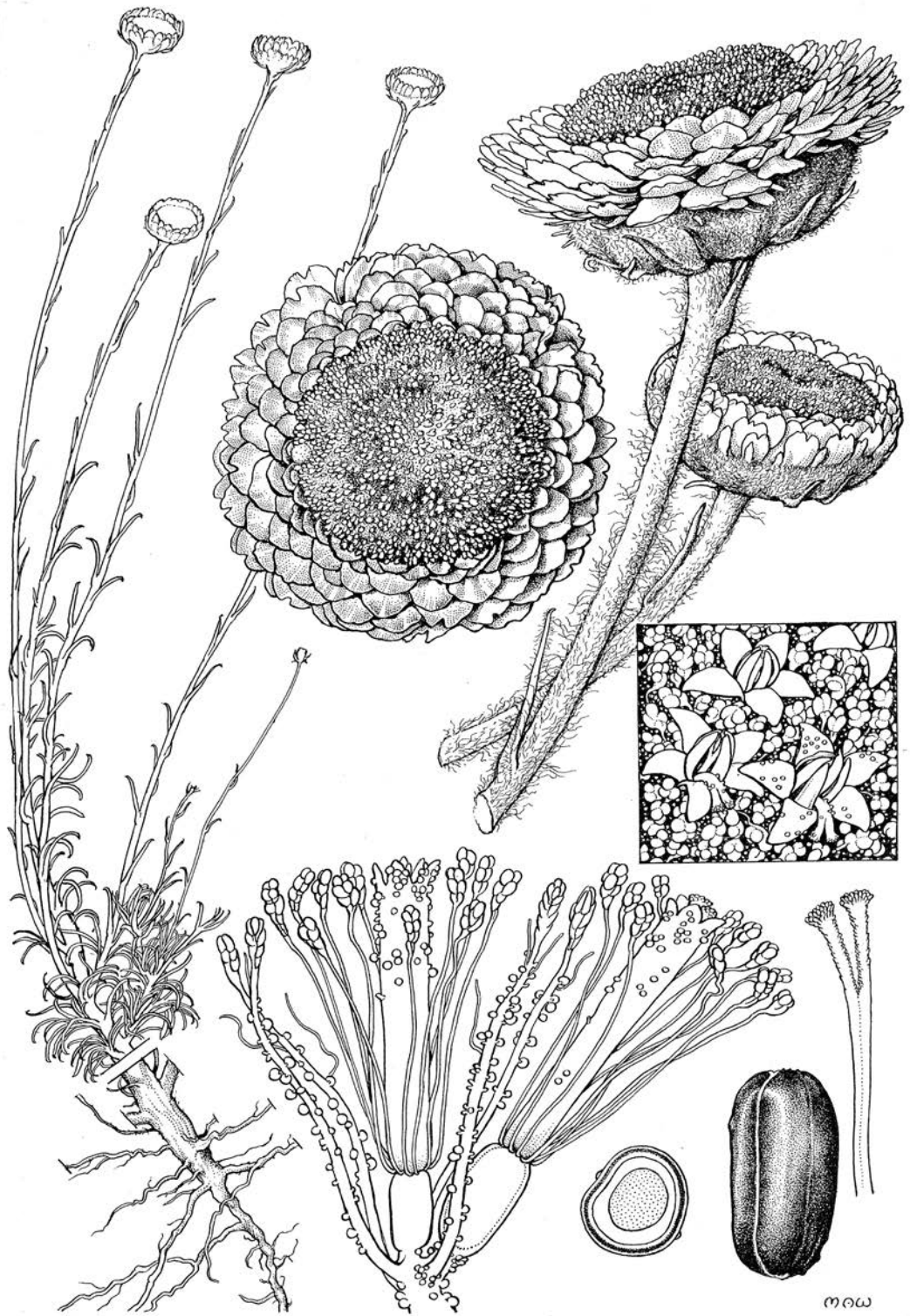


Figure 18. *Rhetinocarpha suffruticosa* (Benth.) Paul G.Wilson & M.A.Wilson. Black and white line drawing by Margaret Wilson, for a taxon co-authored by Paul and Margaret (see Wilson & Wilson 2006).

Retirement and beyond

On 2 January 1993, aged 65, Paul formally retired from his employment at the Western Australian Herbarium. However, like so many taxonomists, Paul continued working as an Herbarium Research Associate, continuing to research the Australian Gnaphalieae (Asteraceae), Chenopodiaceae (with Kelly Shepherd) and Rutaceae, including significant treatments of some widespread and complex taxa in the Asteraceae: the *Chrysocephalum apiculatum* (Labill.) Steetz and

C. semipapposum (Labill.) Steetz groups (Wilson 2016), and *Xerochrysum* Tzvelev (Wilson 2017). Both groups have subsequently been the subject of studies by other researchers (Collins *et al.* 2022 and Rowntree, in prep.), further clarifying the systematics and taxonomy of these plants, building on work undertaken by Paul.

In May 2017, 24 years after his formal retirement from the Western Australian Herbarium, Paul retired from his associate status at PERTH, marking the end of an astonishing 52-year span at



Figure 19. Paul Wilson, in his office at the Western Australian Herbarium (the room he occupied from the building's construction in 1970 until the building was decommissioned in 2010), when the herbarium was located on the Department of Agriculture site at the junction of George Street and Hayman Road in Kensington, December 2003. Image: Bruce Maslin.

this institution (see Wege 2017). Following Paul's 'second retirement', much time was enjoyed with wife Margaret on day outings exploring the neighbouring countryside, savouring the Botanical Gardens in Kings Park, visiting the museum, art galleries and other city venues, trips to Fremantle, pursuing music interests, participating in their

regular 'Move and Groove' exercise group, in landcare groups, bushwalking and most especially, further developing their evolving garden with its small wetland, and continuing restoration of the adjacent creekline nature reserve in the Perth suburb of Mundaring.



Figure 20. Western Australian Herbarium stalwarts Bruce Maslin, Paul Wilson and Alex George, 23 August 2021. Image: Margaret Wilson.

Acknowledgements

We are grateful to the following people for their input: librarians Lisa Wright and Nicole Wreford (Western Australian Department of Biodiversity, Conservation and Attractions), Lorrae West (Botanic Gardens and State Herbarium, Adelaide) and Lee Hayes (University of Adelaide), Murray Fagg, Tony Orchard and Dick Schodde for their reminiscences, Robyn Barker, Heather Cunningham, Laurie Haegi Isabel Lauterjung, Wendy-Sian (Kew) and Michelle Waycott and staff of the Western Australian Herbarium: John Huisman, Ben Richardson, Kelly Shepherd and Juliet Wege.

References

- Aitken, R. (2006). *Seeds of change: an illustrated history of Adelaide Botanic Garden*. Board of the Botanic Gardens of Adelaide and State Herbarium and South Australian Department for Environment and Heritage, in association with Blooming Books, Melbourne.
- Al-Turki, T.A., Swarupanandan, K., Wilson, P.G. (2003). Primary vasculature in Chenopodiaceae: a re-interpretation and implications for systematics and evolution. *Botanical Journal of the Linnean Society* **143**: 337–374.

- Aplin, T.E.H., Wilson P.G. (1988). The vegetation of Western Australia. *Western Australian Year Book* **25**: 49–56.
- Aplin, T.E.H., Wilson Paul G. (1989). The vegetation of Western Australia. *Western Australian Year Book* **26**: 49–57.
- Beard, J.S. (1972–1980). *Vegetation Survey of Western Australia, 1:1 000 000 Series*. University of Western Australia, Nedlands.
- Beard, J.S. (1974–1980). *Vegetation Survey of Western Australia, 1:250 000 Series*. Vegmap Publications, Applecross.
- Burbidge, A.A. and McKenzie, N.L. (eds) (1978) *The Islands of the North-West Kimberley, Western Australia*, pp. 1–47. Department of Fisheries and Wildlife, Perth.
- Board of Governors (1950). *Annual Report of the Board of Governors of the Botanic Garden, 1949–1950*. Government Printer, Adelaide.
- Board of Governors (1955). *Annual Report of the Board of Governors of the Botanic Garden, 1954–1955*. Government Printer, Adelaide.
- Board of Governors (1956). *Annual Report of the Board of Governors of the Botanic Garden, 1955–1956*. Government Printer, Adelaide.
- Board of Governors (1965). *109th Annual Report of The Board of Governors of the Botanic Garden for the Year ended 30th June 1964*. Government Printer, Adelaide.
- Board of Governors (1967). *111th Annual Report of The Board of Governors of the Botanic Garden for the Year ended 30th June 1966*. Government Printer, Adelaide.
- Board of Governors (1969). *113th Annual Report of The Board of Governors of the Botanic Garden for the Year ended 30th June 1968*. Government Printer, Adelaide.
- Board of Governors (1976). *121st Annual Report of The Board of Governors of the Botanic Garden for the Year ended 30th June 1976*. Govt Printer, Adelaide.
- Briggs B., Eichler Hj., Pedley L., Symon D., Wilson P. (1976). Preparation of Botanical Papers. Taxonomic Publication Committee – ASBS, stencil machine printed paper, postmarked Sydney.
- Chalmers, L., Wheeler, J. (1997). *Native vegetation of freshwater rivers & creeks in south Western Australia*. Water and Rivers Commission, East Perth.
- Collins, T.L., Schmidt-Lebuhn, A.N., Andrew, R.L., Telford, I.R.H., Bruhl, J.J. (2022). There's gold in them thar hills! Morphology and molecules delimit species in *Xerochrysum* (Asteraceae; Gnaphalieae) and reveal many new taxa. *Australian Systematic Botany* **35(2)**: 120–185.
- Eardley, C.M. (1947). [Reports of the Herbaria]. South Australia. The Herbarium of the University of Adelaide. *Australasian Herbarium News* **1**: 22–24.
- Eichler, Hj. (1965). *Supplement to J. M. Black's Flora of South Australia* (second edition, 1943–1957). Government Printer, Adelaide.
- George, A.S. (ed.) (1984). *Flora of Australia*, vol. 4: Phytolaccaceae to Chenopodiaceae. Australian Government Publishing Service, Canberra.
- George, A.S. (ed.) (2023). *The Australian Botanical Liaison Officer scheme at Kew, 1937–2009*, p. 352. Published by the author, Perth.
- George, A.S., McCusker, A., Orchard, A.E. (1999). Development of the Flora of Australia project. In: A.E.Orchard (ed.), *Flora of Australia*, 2nd edn, **1**: 105–124. ABRS/CSIRO Publishing Canberra/Melbourne.
- Goudie, A.S. and Sands, M.J.S. (1989). The Kimberley Research Project, Western Australia 1988: A Report. *The Geographical Journal* **155(2)**: 161–166.
- Gray, N. (1993). *Sun, Sea, Crab And Me*. Fremantle Press, Fremantle.
- Haegi, L. (2022). Botany and science at Adelaide's Botanic Gardens since the founding of the State Herbarium. *Swainsona* **30**: 53–68.

- Hewson, H.J. (1988). *Plant Indumentum. A Handbook of Terminology*. Australian Government Publishing Service, Canberra.
- Hodges, J.W. (1971). *The Moths of America, North of Mexico, including Greenland*. Fasc. 21 Sphingoidea. E.W. Classey, Ltd. and R.B.D. Publications, Inc. London.
- Kenneally, K.F., Edinger, D.C., Willing, T. (1996). *Broome and Beyond. Plants and people of the Dampier Peninsula, Kimberley, Western Australia*. Department of Conservation and Land Management, Como.
- Kenneally, K.F., Wilson, P.G., Semeniuk, V. (1978). A new character for distinguishing vegetative material of the mangrove genera *Bruguiera* and *Rhizophora* (Rhizophoraceae). *Nuytsia* **2**: 178–180.
- Lally, T., Wilson, P.G. (2008). *Kennedia lateritia*, a new name for *Kennedia macrophylla* (Fabaceae). *Nuytsia* **18**: 340–341.
- Lothian, N. (1949). The Botanic Gardens – Adelaide – South Australia. *Australasian Herbarium News* **4**: 4–6.
- Marchant, N.G., Wheeler, J.R., Rye, B.L., Bennett, E.M., Lander, N.S., Macfarlane, T.D. (eds) (1987). *Flora of the Perth Region*. Western Australian Department of Agriculture, Como.
- Marchant, N.G. (1998). Dedication to Paul Graham Wilson. *Nuytsia* **12(2)**: 161.
- Maslin, B.R., Wilson, P.G. (2007). (1787) Proposal to conserve the name *Acacia cyclops* against *A. eglandulosa* (Leguminosae). *Taxon* **56**: 961–962.
- Orchard A.E. (1999a). Introduction. In: A.E. Orchard (ed.), *Flora of Australia*, 2nd edn **1**: 1–9. ABR/CSIRO Australia, Canberra/Melbourne.
- Orchard, A.E. (1999b). A history of systematic botany in Australia. In: A.E. Orchard (ed.), *Flora of Australia* 2nd edn, **1**: 11–103. ABR/CSIRO Australia, Canberra/Melbourne.
- Robertson, E.L. (1986). Botany, pp. 101–149. In: C.R. Twidale, J.J. Tyler, M. Davies (eds). *Ideas and Endeavours – The Natural Sciences in South Australia*. Royal Society of South Australia, Adelaide
- Sands, M.J.S. (1986). Ronald Melville, I.S.O., B.Sc., Ph.D., M.P.S., Ph.C., F.L.S. *Kew Bulletin* **41(4)**: 760–768.
- Schmidt-Lebuhn, A.N., Bruhl, J., Telford, I.R.H., Wilson, P.G. (2015) Phylogenetic relationships of *Coronidium*, *Xerochrysum* and several neglected Australian species of "*Helichrysum*" (Asteraceae: Gnaphalieae). *Taxon* **64(1)**: 96–109.
- Semeniuk, V., Kenneally, K.F., Wilson, P.G. (1978). *Mangroves of Western Australia*. Western Australian Naturalists' Club, Nedlands.
- Shepherd, K.A., Wilson, P.G. (2007). Incorporation of the Australian genera *Halosarcia*, *Pachycornia*, *Sclerostegia* and *Tegicornia* into *Tecticornia* (Salicornioideae, Chenopodiaceae). *Australian Systematic Botany* **20**: 319–331.
- Schodde, R. (1963). A taxonomic revision of the genus *Millotia* Cassini (Compositae). *Transactions of the Royal Society of South Australia* **87**: 209–242.
- Shepherd, K.A. (2007). *Tecticornia indefessa* (Chenopodiaceae: Salicornioideae), a new mat samphire (formerly *Tegicornia*) from north of Esperance, Western Australia. *Nuytsia* **17**: 367–374.
- Underwood, R. (2011). *A botanical journey. The story of the Western Australian Herbarium*, p. 275. Department of Environment and Conservation, Perth.
- van Steenis-Kruseman, M.J. (1974). Malesian plant collectors and collections, supplement II. *Flora Malesiana* ser. 1, **8**: pp. 28, 87.
- Wege, J. (2017). A fond farewell. *Australian Systematic Botany Newsletter* **171**: 30–31.
- Wilson, P.G. (1958). Contributions to the flora of tropical America: LXIII. Plantae Hintonianae: XII. *Kew Bulletin* **13(1)**: 155–170.

- Wilson, P.G. (1960). A consideration of the species previously included within *Helipterum albicans* (A.Cunn.) DC. *Transactions and Proceedings of the Royal Society of South Australia* **83**: 163–177.
- Wilson, P.G. (1961). A taxonomic revision of the genus *Correa* (Rutaceae). *Transactions of the Royal Society of South Australia* **85**: 21–53.
- Wilson, P.G. (1962). Systematic Botany News-Sheet. *Australian Journal of Science* **25(3)**: 80.
- Wilson, P.G. (1968). A taxonomic revision of the genera *Crowea*, *Eriostemon*, and *Phebalium* (Rutaceae). Unpublished Masters thesis, University of Adelaide.
- Wilson, P.G. (1970). A taxonomic revision of the genera *Crowea*, *Eriostemon* and *Phebalium* (Rutaceae). *Nuytsia* **1**: 3–155.
- Wilson, P.G. (1971). The vegetation of Western Australia, with an account of the family Rutaceae. *Western Australian Yearbook* **9**: 50–57.
- Wilson, P.G. (1972). The vegetation of Western Australia, with an account of the family Proteaceae. *Western Australian Yearbook* **11**: 51–58.
- Wilson, P.G. (1980). A revision of the Australian species of Salicornieae (Chenopodiaceae). *Nuytsia* **3**: 3–154.
- Wilson, P.G. (1981). Chenopodiaceae. In: J.P. Jessop (ed.), *Flora of Central Australia*, pp. 49–75. Reed, Sydney.
- Wilson, P.G. (1983). A taxonomic revision of the tribe Chenopodieae (Chenopodiaceae) in Australia. *Nuytsia* **4**: 135–262.
- Wilson, P.G. (1984). Chenopodiaceae. In: A.S. George (ed.), *Flora of Australia* **4**, pp. 81–317, 322–330. Australian Government Publishing Service, Canberra.
- Wilson, P.G. (1988). The early collecting numbers of Charles A. Gardner. *Australian Systematic Botany Society Newsletter* **54**: 4–6.
- Wilson, P.G. (1992a). The classification of Australian species currently included in *Helipterum* and related genera (Asteraceae: Gnaphalieae): Part 1. *Nuytsia* **8**: 379–438.
- Wilson, P.G. (1992b). The classification of some Australian species currently included in *Helipterum* and *Helichrysum* (Asteraceae: Gnaphalieae): Part 3, *Anemocarpa* and *Argentipallium*, two new genera from Australia. *Nuytsia* **8**: 447–460.
- Wilson, P.G. (1992c). The *Lawrencella* complex (Asteraceae: Gnaphalieae: Angianthinae) of Australia. *Nuytsia* **8**: 361–377.
- Wilson, P.G. (1992d). The classification of Australian species currently included in *Helipterum* (Asteraceae: Gnaphalieae): part 2, *Leucochrysum*. *Nuytsia* **8**: 439–446.
- Wilson, P.G. (1992e). Chenopodiaceae. In: J.R. Wheeler (ed.), B.L. Rye, B.L. Koch, A.J.G. Wilson, *Flora of the Kimberley Region*, pp. 97–106. Western Australian Herbarium, Como.
- Wilson, P.G. (1992f). *Philotheca citrina* (Rutaceae), a new species from Western Australia. *Nuytsia* **8**: 245–248.
- Wilson, P.G. (1998). *Illecebrum verticillatum* (Caryophyllaceae), a new record for Australia. *Nuytsia* **12**: 155–156.
- Wilson, P.G. (2016). A taxonomic treatment of *Chrysocephalum apiculatum* and *C. semipapposum* (Asteraceae: Gnaphalieae). *Nuytsia* **27**: 33–73.
- Wilson, P.G. (2017). An examination of the Australian genus *Xerochrysum* (Asteraceae: Gnaphalieae). *Nuytsia* **28**: 11–38.
- Wilson, P.G., Wilson, M. (2006). *Rhetinocarpha* (Asteraceae: Gnaphalieae) – a new genus from Western Australia. *Nuytsia* **16**: 255–260.

It's hard to say goodbye to a personal hero

Kelly Shepherd, Western Australian Herbarium

Paul had already retired when I began my PhD on the Australian samphires in 1999 but was still very active at the WA Herbarium as a research associate. He was thrilled that someone else was taking on his beloved samphires and while he did not serve as a formal supervisor, he was an invaluable mentor. We became a small club of two, loving a group of plants that most others hated. We didn't spend a lot of time working together, as he gently pointed out that I would just have to take the time to learn the plants myself. However, he was always on hand to help correct identifications and was endlessly patient in answering all my questions.

In this context I want to share one of my most significant memories of Paul, which while also

being one of the more embarrassing moments of my life, highlights what an utterly lovely person he was. I was more than a year into my PhD, and I was incredibly stressed. I had just completed a cytology study, which confirmed the ploidy levels in samphires were even crazier than I expected. I had found several accessions of a species had wildly different ploidy levels, including representatives within the same population and even seedlings germinated from the same mother plant! I was completely overwhelmed, knowing that I would never be able to understand the complexities of an already crushingly challenging group (Figure 1). In this awful mental state, I visited the WA Herbarium (at its former location) and bumped into Paul on the first floor outside the library. He smiled and gently asked how I was going...



Figure 1. Kelly Shepherd feeling overwhelmed and confused by samphire complexities during her PhD studies c. 2001. Image: Juliet Wege.

looking up into his kind face, I felt in that moment he truly was the only person on the planet who could possibly understand how overwhelmed I was feeling, and instead of saying something to that effect... I let out an outrageously ugly noise like a wounded warthog. Eyes filling with tears I clamped a hand over my mouth and fled to the back of the library as I continued to make awful heaving noises, gasping for air as the sobs got louder and louder. Thankfully everyone, including Paul, pretended they couldn't hear a thing and left me to it. Once I'd eventually calmed down, I went to find Paul to apologise. Perhaps because he was only a month younger than my own dad or the fact that he had daughters of his own, he somehow seemed to know just how to handle my drama, making me feel like everything was going to be ok.

Years later I wanted to commemorate Paul's tremendous contribution to samphire taxonomy and acknowledge his support for me personally by naming a species after him. I perhaps naively asked

him if he was okay with this, and he responded in his usual humble style that he really didn't want a species named for him. This flummoxed me, as I truly wanted to commemorate him but didn't want to go against his wishes. After much agonising, I concluded I could exploit a loophole by naming *Tecticornia indefessa* (from the Latin unwearied, indefatigable), in acknowledgement of Paul's unwavering and tireless work without directly using his name. I never directly asked if he was unhappy with this but knowing Paul, if I had, he would have been too much of a gentleman to make me feel bad about it.

I can't really summarise the impact Paul had on me, but I do think of him most weeks. Every time I sign a determinavit slip for a samphire that was previously included in *Halosarcia* (or *Sclerostegia*, *Pachycornia* or *Tegicornia*) that together we transferred to *Tecticornia*, I usually have to sign the authority as '(Paul G.Wilson) K.A.Sheph. & Paul G.Wilson' and it's like I am surrounded by a metaphorical Paul Wilson hug.



Figure 2. The small but mighty *Tecticornia indefessa* K.A.Sheph. (K.A. Shepherd & S.R. Willis KS1774, PERTH 09187480), named in acknowledgement of Paul G. Wilson's contribution to *Tecticornia* taxonomy.

Jacob John – in Memoriam

Stuart Hellenen, with thanks to Mina John



It is with great sadness that we announce the passing of our friend and colleague, Professor Jacob John. Jacob passed away peacefully on October 30th, 2024.

With Jacob's passing, Australia has lost its foremost expert in diatom taxonomy and ecology, and the broader international diatom and aquatic science community has lost a well-respected and valued member.

For those of us who knew him, Jacob will be remembered as a colleague, a researcher, a teacher, a mentor, a friend, a father and a grandfather.

Jacob obtained a B.Sc. (Botany, Zoology & Human Physiology) in 1959 and an M.Sc. (Botany) in 1961 (Madras University). He started his career

as a botanist but soon found himself pursuing interests in pharmacology, social anthropology and, especially, human genetics. Jacob's illustrious teaching career began in India where he taught genetics and pharmacology before moving to Ethiopia, where he published a book on the social anthropology of Ethiopian tribal peoples.

In 1972, Jacob moved to Perth, Western Australia—the place he would call home for the next 52 years. Jacob joined the pharmacy department of the Western Australian Institute of Technology (WAIT) as a tutor in biology. As departments changed and merged and WAIT eventually became Curtin University in 1987, Jacob went on to teach Plant Physiology, Lower Plants (which included algae), Introductory Biology, Cell Biology and, of course, Human Genetics. Jacob's charismatic, humorous and, at times, flamboyant teaching style made him

a favourite among all of his students throughout his extensive teaching career.

Jacob hadn't been in Perth long when he took an interest in the wetlands of the Swan Coastal Plain (on which Perth is situated) and in the Swan River itself, and soon realised that very little work had been done on the biodiversity of local algae. This was the beginning of Jacob's passion for diatoms!

Jacob undertook his PhD at the University of Western Australia on "the ecology and taxonomy of phytoplankton in the Swan River Estuary, Perth, Australia". This research culminated in the publication of the first comprehensive treatise of diatoms in Australia in 1983— "The diatom flora of the Swan River Estuary, Western Australia" *Bibliotheca Phycologica*, Band 64, published by J. Cramer.

During his academic career at Curtin University, Jacob supervised 50 Honours and post-graduate diploma students, 20 post-graduate degrees (M.Sc. and Ph.D.) and 75 third-year research projects. Within the School of Molecular and Life

Sciences (and its previous incarnations), Jacob was the coordinator for the honours degree program for 18 years and the post-graduate coordinator for over 20 years. Jacob was awarded the Curtin University Vice-chancellor's Award for Excellence in Research 1991.

Jacob has authored 292 publications; 51 peer-reviewed publications in national and international journals, 14 books, 140 conference papers, 70 consultancy reports and 17 popular science publications. Jacob described over 200 species of diatom new to science.

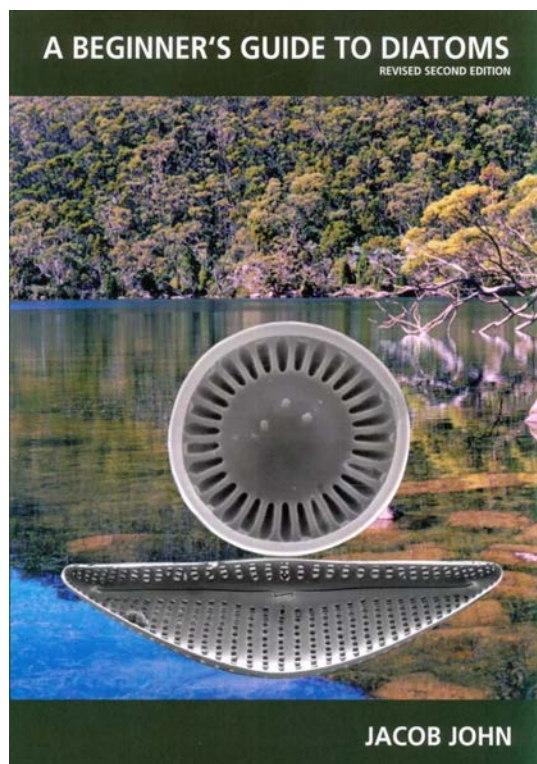
Jacob undertook research, and of course diatom collecting expeditions, in many countries including the USA, France, Russia (Siberia), Mexico, Japan, Finland, The Netherlands, Greece and all over Australia.

After his retirement from Curtin University in 2012, Jacob was invited by the Department of Biodiversity, Conservation and Attractions (DBCA) to establish a Diatom Herbarium as part of the Western Australian Herbarium. Since 2013, Jacob had been organising a vast collection of diatom slides (~55,000) and preparing the Diatom Flora of Australia in five volumes (of which three have already been published by Koeltz Scientific Germany).

In 2022, Jacob was awarded the Gerald W. Prescott award for the best book on Algae by the Phycological Society of America for his book *Diatoms of Arid Australia*, Volume 3 of the Diatom Flora of Australia.

Anyone who ever met Jacob would remember him as a kind and gentle person, an engaging speaker, someone who was quick to see the humour in any situation and as someone who was always happy to have a chat.

Jacob is survived by his daughters Mina and Lena, his sons-in-law David and Roy, and his grandchildren Aaron, Leela, Rania, Jacina and Sahana.



John, J. (2012) *A beginner's guide to diatoms*. Ruggell, Liechtenstein: Gantner Verlag.



Australasian Systematic Botany Society Inc.

MINUTES

46th Annual General Meeting

Zoom videoconference held via Teams on 28th November 2024.

Meeting opened at 12.30 pm (AEST)

Welcome and apologies:

Present: John Clarkson, Kelly Shepherd, Mike Bayly, Katharina Nargar, Tim Collins, Tim Hammer, Patrick Fahey, Patricia (Patty) Chan, Jen Tate, Peter Wilson, Emily Hoskin, Heidi Meudt, Juliet Wege, Karen Wilson, Tanya Scharaschkin, Joanne Birch, Lalita Simpson, Benjamin Anderson, Vanessa Ryan, Stephanie Chen, Kristina Lemson, Julia Percy-Bower, Rose Andrew, Kerri Clarke, Helen Kennedy, Robb Eastman-Densem, Andrew McDougall, Jeremy Bruhl, Francis Nge, Ilse Breitwieser, Herve Sauquet, Rainer Vogt, Bill Barker, Kerry Ford, Robyn Barker, Frank Udovicic, Andrew Orme, Marco Duretto, Andrew Rozefelds, Richard Jobson, Shelley James, Gareth Holmes, Greg Leach, Vanessa Ryan.

Apologies: Anna Monro, David Maberley, Daniel Murphy, Frank Zich, John Conran, Bob Hill, Bruce Maslin, William McDonald, Maggie Nightingale, Peter Heenan, James Clugston, Martin Lewis on behalf of Tepapa Library, Stephen Bell, Linda Broadhurst, Niels Klazenga, Teresa Lebel, Sarah Mathews.

Minutes of previous AGM were published in the March 2024 Newsletter #197/198 and taken as read.

Moved as a true record of the meeting by Karen Wilson, seconded by Vanessa Ryan.

Reports: The minutes from reports are to be published in the December 2024 Newsletter.

- President's report (presented by Katharina Nargar): see p. 37 of this Newsletter.
- Treasurer's report (presented by Mike Bayly): see p. 38 of this Newsletter.
- Benjamin Anderson Q: What will be the amount awarded for the Gareth Nelson Award? Mike Bayly: The amount awarded will be partly dependent on the growth of the funds invested and the income produced. This is likely to be in the order of a few thousand dollars initially but we hope to increase the amount as the fund grows. The aim is for the award to be perpetual based upon a sustainable investment.
- Student/ECR Subcommittee report (presented by Patrick Fahey): see p. 51 of this Newsletter.
- ASBS Newsletter report (presented by John Clarkson): see p. 51 of this Newsletter.
- Vanessa Ryan comment: There are cheaper options than using Adobe products. I've recently switched to using Affinity and it seems to be just as good.

- Research Committee report (presented by John Clarkson): see p. 54 of this Newsletter.
- Webmasters' report (presented by Kelly Shepherd): see p. 56 of this Newsletter.
- Facebook report (presented by Mike Bayly): see p. 57 of this Newsletter.

Other business:

Nancy Burbidge Medal 2024 announced by Katharina Nargar: Karen Wilson was announced as the 2024 Nancy Burbidge Medal recipient. Karen will prepare a Burbidge Lecture for the 2025 ASBS Conference.

New logo: Patty Chan updated the society on the project brief. A choice of three new logos or retention of the current logo will be decided upon by members in early 2025. If there is a new

logo selected the drafts will be sent to a graphic designer for production of a new logo.

Next ASBS Conference. See President's report.

General Business: None.

New ASBS Council: Katharina Nargar announced the new ASBS Council. All positions have been filled. John Clarkson is leaving the ASBS Council having completed the maximum term allowable under the rules. Peter Heenan joins Council as Vice-President, Mike Bayly is Treasurer, Tim Collins is Secretary, Katharina Nargar remains as President. Lalita Simpson and Kerry Ford continue in the two Councillor positions. We welcomed Helen Kennedy as Newsletter Editor.

Close of meeting: 2:00 pm EDT

President's report

Katharina Nargar, ASBS President

After two very busy years leading up to the 50th anniversary, which involved the website revamp, ASBS rule changes, and preparations for the 50th anniversary celebrations at Biosystematics 2023 in Canberra, Council returned to a quarterly meeting schedule in 2024. This year, we welcomed two new Council members: Tim Collins as Secretary, who joined from his previous role on the ASBS Student and Early Career Research (SECR) subcommittee, and Kerry Ford as the New Zealand representative on Council.

Mike Bayly took over as Treasurer from John Clarkson, following the transition of our system from a computer-based membership database to website-based tools, which require fast internet access. John took on the role of Vice President and supported Mike during the transition. Lalita Simpson continued as Councillor and joined the logo redesign group, with Patricia Chan and me working on the logo conceptualization.

While Council continued searching for a new newsletter editor this year, Lizzy Joyce agreed to manage the March issue. John then stepped in to edit the June and September newsletters with

assistance from Helen Kennedy, Kelly Shepherd, and Todd McLay. Many thanks to this team for keeping the newsletter running during the interim. Further updates on the new editor and the ASBS newsletter format going forward can be found in the newsletter report.

Council is currently negotiating a potential partnership agreement with the Australian Systematic Botany (ASB) journal. Patrick Hannah, the new CSIRO journal manager responsible for ASB, approached us with a proposal to formalize the relationship between the Society and the journal. ASB has already supported our conferences by offering two student prizes: the Pauline Ladiges award for the best student talk and an award for the best poster or lightning talk. In return, we have provided ASB with free conference attendance and exhibition space. The new partnership would maintain these elements while offering additional benefits, such as discounts for publishing Open Access and the opportunity to host a special issue for our annual conference. This partnership would also involve Early Career Researchers (ECRs) serving as co-editors, gaining experience in scientific journal editing. ASB has provided a draft agreement, and Council is negotiating the terms.

This year, Council was approached by the

Australian paleobotany community, through Anne-Marie Tosolini (University of Melbourne), who expressed interest in joining ASBS and forming a paleobotany chapter. We welcomed this proposal, as we already have several paleobotanists among our members and presenters at ASBS conferences, and we support paleobotany students and ECRs through our grant schemes. Mike has been leading these discussions on behalf of Council to define what this initiative might look like. More updates will follow next year.

Taxonomy Australia plans to launch an advocacy campaign to describe all Australian species within a generation (the next 25 years), which includes a request for increased funding for the Australian Biological Resources Study (ABRS). This initiative builds on the goals outlined in the Decadal Plan for Biosystematics and Taxonomy. ASBS is represented on the Steering Committee of Taxonomy Australia, where this proposal was discussed. Taxonomy Australia is now seeking ASBS's endorsement for the campaign and has provided Council with a draft advocacy statement. Council is currently reviewing the proposal.

A quick update on the next ASBS conference: it is scheduled for the second half of 2025. Negotiations with the potential host institution are ongoing, and Council will announce the conference location and dates once they are confirmed.

Finally, I would like to express my sincere gratitude to my fellow Council members for their hard work and valuable contributions to the Society this year. A special thank you goes to John Clarkson, who is leaving Council after serving the maximum term of six consecutive years. John has made immense contributions during his tenure, including roles as Treasurer and Vice President, and has provided exceptional service to the Society as a whole. We deeply appreciate his corporate memory and hope to continue drawing on his ASBS expertise in the future. Thank you, John, for your unwavering dedication to our Society.

I would also like to thank our student and ECR representatives—Helen Kennedy, Andrew McDougall, Patrick Fahey, and Paul Baleeiro—our webmasters Kelly Shepherd and Anna Monro, and the logo redesign group, particularly Patty Chan, for their outstanding work this year. Many thanks also to the Research Committee for their crucial contributions to evaluating the ASBS grants.

Update: The 2025 ASBS conference will be held at the University of New England in Armidale from the 2nd to the 6th of November.

Mark the dates in your calendar. More details to follow soon.

Treasurer's report 2023 / 24

Mike Bayly, ASBS Treasurer

1. Introduction

I am pleased to present the financial statement of the Australasian Systematic Botany Society Inc. (ASBS) for the year ended 30 June 2024 (Appendix 1). The finances of the Society are run on a financial year basis with data reported on a full cash basis.

Melinda McAllister of BHT Partners Eltham audited the accounts. Her report to members is attached as Appendix 2.

2. Membership

Table 1 summarises the number of members in November 2024. Membership numbers remain stable with new members roughly balancing resignations and deaths.

3. Management of Funds

3.1. General Fund

The General Fund finished the financial year with a deficit of \$10,303. This is the second year

Table 1. Membership of ASBS as of 27th November 2024 (non-financial members in brackets).

Fee	Full	Concessional	Gratis	Total
Ordinary	184 (35)	n/a	0	184 (35)
Student	n/a	54 (19)	0	54 (19)
Retiree	n/a	64 (11)	0	64 (11)
Unemployed	n/a	2 (0)	0	2 (0)
Institutional	4 (0)	n/a	14	18 (0)
Life	n/a	n/a	6	6
Total	188 (35)	120 (30)	20	328 (65)

The following new members have been admitted to the Society since the last AGM:

Mathew Bell	SLR Consulting	Ordinary
Yuqun Du	The University of Melbourne	Student
Candice Farrugia-Roberts	The University of Melbourne	Student
Charlotte Lily Nelson	University of Western Australia	Student
Monica Ly	The University of Melbourne	Student
Consolata Nanjala	James Cook University	Student
Lara Shepherd	Museum of New Zealand	Ordinary
Rahul Sreekumar	Central Queensland University	Ordinary
Jacinta Torrisi	James Cook University	Student
Greg Whitbread	Canberra	Retired
Katie White		Ordinary

in a row that we've had a net deficit, which is highly unusual, but it was foreshadowed in John Clarkson's Treasurer's report for the previous financial year. It is explained largely by the outlay of \$11,717 in student travel grants, which mostly assisted student attendance at the Biosystematics 2023 conference in Canberra. Those grants were mostly supported by student travel funding we received from the Australian Biological Resources Study (ABRS) in the 2019 and 2020 financial years (\$16,500 in total) that we did not spend until now because of COVID-related travel restrictions; those funds are now fully expended, and they will not affect our balance sheet for the 2024/2025 financial year. The other substantial expenses for the financial year include a one-off \$5,000 donation to support the activities of Taxonomy Australia and \$9,020 in costs related

to redevelopment of our website.

Operating costs for the financial year were partly defrayed by profits from the Biosystematics 2023 conference. Those profits were shared between the three participating societies (ASBS, Society of Australian Systematic Biologists, and Australasian Mycological Society) based on the proportion of conference registrants from each society. Of the funds received by ASBS, \$10,000 was transferred to General Fund investments, \$5,000 to the Research Fund and \$3,506 remained in our PayPal account and Conference account, which both form part of the General Fund.

The major ongoing source of income for the General Fund, is annual membership fees. Although most members are prompt in paying

their annual membership, the number of unpaid memberships at the end of the financial year (65) was the highest it has been in recent years, and more than double the number reported for the year ending Jun 2022 (27). Although the new payment method through the website, initiated in January 2024, ran smoothly for most members, it presented challenges for many, and it is unclear if this affected the number of membership payments received. We anticipate that the online renewal process will run more smoothly in 2025 and I will continue to contact members about unpaid fees and to provide support with navigating the process. Any members with questions about their membership payments can contact me at treasurer.asbs@gmail.com.

Assets in the General Fund are held as cash at call or in reasonably short (6–9 months) term deposits. With growth in interest rates during the financial year, up from previous record lows, there was an increase in investment income over recent years.

Despite reported deficits for the last two years, which are explained by differences in timing between when we received and spent funds, the Society remains in a very strong financial position. Our core operating expenses, related to the newsletter, website, meetings and council business, are adequately covered by membership payments and investment income in the General Fund, and we have solid General Fund assets of \$146,964.85. As such, Council has agreed to leave membership fees unchanged for 2025.

3.2. Research Fund

The Research Fund derives its income primarily from donations, investment income, and profits from conferences. As a not-for-profit organisation with tax exempt status, the Society is also able to claim a refund of franking credits paid on its Colonial First State investment. The Society continues to offer up to \$40,000 each financial year to support research projects in plant systematics. Projects supported include the Hansjörg Eichler Research Grants (up to \$20,000) and the Marlies Eichler Postdoctoral Fellowships (up to \$20,000). Grants paid in the 2023/24 financial year totalled \$38,058.92; some of those

payments were for grants awarded in previous financial years.

3.2.1 Research Fund donations

This financial year, 43 members made donations or bequests to the Hansjörg Eichler Research Fund totalling \$69,358. All donors, including the following members who agreed to having their names recorded publicly, are thanked for their generous support (Table 2).

3.2.2 Establishment of the Gareth Nelson Award

Of particular note, in the 2023/24 financial year, was a large donation of \$50,000 by an anonymous donor. Those funds, together with a subsequent \$50,000 donation, by the same donor, in the second half of 2024, will be used to establish a new grant award within the Research Fund. The award, to be known as the “Gareth Nelson Award”, honours ASBS member Prof. Gareth Nelson, who will be well-known to members through his significant contribution to the theory and practice of phylogenetic systematics and historical biogeography. The award will support students and early career postdoctoral botanists, who are current members of The Society, to conduct projects contributing to systematic botany and biogeography (including land plants, algae, and fungi) in Australasia. Funds supporting the Gareth Nelson Award will be separately managed within our Research Fund and we will accept further targeted donations to this award. Council plans to open the first round of applications for the Gareth Nelson Award in the second half of 2025. The initial monetary value of the award will be determined by investment income, but we aim for it to be similar to the Hansjörg Eichler Research Grants. We will give further details and advertise the first call for applications through the Newsletter, website and an email to members. We thank the anonymous donor for this very generous donation to honour Prof. Nelson and to support the research activities of early career researchers in botanical systematics.

Table 2. ASBS members who made donations or bequests to the Hansjörg Eichler Research Fund.

Michael Bayly	Betsy Jackes	Kelly Shepherd
Barbara Briggs	Laurie Jessup	Philip Short
Jessica Bruce	Greg Leach	Nikola Streiber
Kerri Clarke	Bill McDonald	Stephen van Leeuwen
John Clarkson	David Meagher	Helen Vonow
Murray Fagg	Katharina Nargar	Juliet Wege
Frank Hemmings	Sara Nour	Judy West
Rod Henderson	Andrew Orme	Molly Whalen
Petrus Heyligers	Jo Palmer	Annabel Wheeler
Gareth Holmes	Rosemary Purdie	Karen Wilson
John Hosking	Brooke Raphael	

3.2.3 Financial performance and management of the Research Fund

The Research Fund ended the financial year with an operating surplus of \$85,474.31. Excluding the large \$50,000 donation and \$5,000 in conference profits, this result is similar to that for the previous financial year.

Most assets in the Research Fund are held in a managed fund, in which we first invested in 2017. Since that time, all income from distributions and rebates has been reinvested in the managed fund but we have not otherwise added to the managed fund or, up till this year, made any withdrawals, as we usually had sufficient cash assets in the Research Fund to make annual research grant payments. This year, cash holdings were depleted to the extent that we needed to make our first withdrawal (\$10,000) from the managed fund to cover research grant payments, and it is likely that we will need to make further withdrawals in the coming years. However, such withdrawals, to manage annual cash flow, were anticipated when we first invested in the fund. We will just need to be judicious with regards to future withdrawals accounting for the ever changing state of the market and unit prices in the managed fund.

Despite reduced investment income over the previous two financial years, returns from the managed fund, on average since 2017, comfortably exceed our annual grant commitment of \$40,000. Over the 2023/24 financial year, for

instance, the net (unrealised) growth in the value of the managed fund investment was \$69,464. Of course, the value of the managed fund investment fluctuates with unit price, but it is pleasing that returns continue to meet our needs. As total assets in the Research Fund continue to grow, as a result of both investment returns and ongoing donations from members, it might soon be time to further assess our investment profile and whether we could sustain an increase (in addition to the new Gareth Nelson Award) in the size or scope of our annual grant offerings.

4. Further comments- the role of Treasurer

Being ASBS Treasurer is a rewarding but sizeable job. As I settled (back) into the role, I have greatly appreciated support and advice from John Clarkson on financial matters and the assistance of Kelly Shepherd with the website. Having learnt the ropes, I have put my hand up to do the job for another year. However, I only have a maximum of two more terms left on Council, so we will soon need someone new to take on the role. Anyone who is interested in nominating for the position can talk to me for an honest summary of what is involved. Despite the volume of work, it is a fun job to do, interacting with members and keeping the wheels of our society running.

Appendix I

Financial Report for the year ended 30 June 2024

Financial Report for the year ended 30 June 2024
Australasian Systematic Botany Society Incorporated
ABN 22092454279

Council's Report

Your Council members submit the financial statement of the Australasian Systematic Botany Society Incorporated for the year ended 30 June 2024.

Council Members

The names of the Council members who held office throughout the reporting period and at the date of this report are:

President	Katharina Nargar	Elected November 2022
Vice President	John Clarkson	Elected November 2023
Vice President	Mike Bayly	Stood down November 2023
Secretary	Tim Collins	Elected November 2023
	Heidi Meudt	Stood down November 2023
Treasurer	Mike Bayly	Elected November 2023
	John Clarkson	Stood down November 2023
Councillor	Kerry Ford	Elected November 2023
	Kelly Shepherd	Stood down November 2023
Councillor	Lalita Simpson	Elected November 2022

Principal Activities

The principal activities of the society during the reporting period were to promote systematic botany in Australasia.

Significant Changes

No significant change in the nature of these activities occurred during the reporting period.

Operating Results

The operating results are as set out here under:

	Year ending June 2024	Year ending June 2023
General Fund	(\$10,302.99)	(\$12,145.48)
Research Fund	\$85,474.31	\$31,927.01
Total	\$75,171.32	\$19,781.53

Signed in accordance with a resolution of the Members of the Council on:



.....

Katharina Nargar (President)

28th November 2024



.....

Mike Bayly (Treasurer)

28th November 2024

Income and Expenditure Statement
Australasian Systematic Botany Society Incorporated
For the year ended 30 June 2024

	2024	2023
General Fund Income		
Cheque Account		
Conference Registrations	4,985.00	–
Conference Sponsorship	5,000.00	
Copyright Agency	-	101.07
Donations to Eichler Fund	65,964.95	16,830.00
Subscriptions	9,573.85	9,525.00
Refund from Research Fund	-	2,000.00
Return of loan to Conference Account	3,000.00	
Transfer from High Interest Savings Account (Rabobank)	16,337.84	
Sundry income	1.74	-
	104,863.38	28,456.07
Conference Cheque Account		
Transfer from General Fund		3,000.00
Sponsorship	13,900.00	–
Registrations	93,180.00	–
Miscellaneous		0.17
	107,080.00	3,000.17
PayPal Account		
Net conference income not transferred to other accounts	2,444.82	-
	2,444.82	0.00
Rabobank Accounts		
Interest High Interest Savings Account	90.42	53.09
Interest Term Deposit 1	3047.86	1,200.50
Interest Term Deposit 2	1626.73	244.70
Transfer from Conference Cheque Account	10,000.00	–
Transfer from General Fund Cheque Account	2,500.00	–
	17,265.01	1,498.29
Total General Fund Income	231,653.21	32,954.53
General Fund Expenses		
Cheque Account		
Council expenses	2,364.73	3,533.06
Auditor's remuneration	1,463.00	1,441.00
Bank charges, credit card fees	342.95	186.47
Student travel assistance	11,717.15	5,033.31
Miscellaneous expenses	368.72	–
Newsletter costs	2,803.10	3,188.13
2022 ECR Conference	-	3,095.54
Web page	9,020.44	6,937.50
Donation to Taxonomy Australia	5,000.00	-
Transfer to High Interest Savings Account (Rabobank)	2,500.00	-
Transfer to Conference Account	9,985.00	3,000.00
Loan to Research Fund	5,000.00	
Transfers to Research Fund	65,969.85	18,685.00
	116,534.94	45,100.01

Conference Account		
Main conference expenses (incl. dinner and mixer)	71,139.29	–
Conference workshops	935.16	–
SECR event	1,462.58	–
Conference field trip	2,206.39	
Donation to Taxonomy Australia	5,000.00	
Share of profits to Australasian Mycological Society	2,200.00	
Share of profits to Soc. of Aus. Systematic Biologists	8,140.00	
Return of cash advance loan from General Fund	3,000.00	
Transfer of profits to General Fund account (Rabobank)	10,000.00	–
Transfer of profits to Research Fund account	5,000.00	–
	109,083.42	0.00
Rabobank Accounts		
Transfer to General Fund Cheque Account	16,337.84	-
	16,337.84	-
Total General Fund Expenses	241,956.20	45,100.01
General Fund Surplus/(Deficit)	(10,302.99)	(12,145.48)
Research Fund Income		
Cheque account		
Donations to Research Fund	69,448.85	16,685.00
Profit from Biosystematics 2023	5,000	–
Franking Credits	1,897.00	2,585.00
Miscellaneous Income		0.03
Loan from General Fund	5,000	2,000.00
Transfer from Managed Fund	10,000.00	–
	91,345.85	21,270.03
Managed Fund		
Investment Income – Colonial Wholesale Investment		
Distributions	54,275.04	30,982.60
Management Cost Rebates	1,184.16	1,106.49
	55,459.20	32,089.09
Total Research Fund Income	146,805.05	53,359.12
Research Fund Expenses		
Cheque account		
Marlies Eichler Fellowships	20,000.00	–
Return Loan to General Fund	-	2,000.00
Hj. Eichler Research Grants	18,058.00	7,182.00
	38,058.00	9,182.00
Managed Fund		
Management Fees	13,272.74	12,250.11
Withdrawal transferred to Research Fund cheque account	10,000.00	–
	23,272.74	12,250.11
Total Research Fund Expenses	61,330.74	21,432.11
Research Fund Surplus/Deficit	85,474.31	31,927.01
Current Year Surplus	75,171.32	19,781.53

Balance Sheet
Australasian Systematic Botany Society Incorporated
As at 30 June 2024

	2024	2023
Assets		
General Fund		
Cash and Cash Equivalents		
General Fund: Cheque Account	11,876.14	23,547.70
General Fund: Rabobank HISA	14,812.70	10,223.74
Conference cheque account	1,061.37	3,064.79
PayPal account	2,444.82	-
Total Cash and Cash Equivalents	30,195.03	36,836.23
Investments		
Rabobank Term Deposit 1	-	65,858.52
Rabobank Term Deposit 2	56,199.82	54,573.09
Rabobank Term Deposit 3	60,570.00	-
Total Investments	116,769.82	120,431.61
Total General Fund	146,964.85	157,267.75
Research Fund		
Cash and Cash Equivalents		
Research Fund: Cheque Account	18,178.41	14,890.56
Research Fund: Term deposit	50,000.00	-
Total Cash and Cash Equivalents	68,178.41	14,890.56
Investments		
Colonial Wholesale Investment	1,297,726.65	1,228,262.69
Total Investments	1,297,726.65	1,228,262.69
Total Research Fund	1,365,905.06	1,243,153.25
Total Assets	1,512,869.91	1,400,421.09
Member's Funds		
Accumulated Surplus	1,400,421.09	1,350,142.77
Current Year Earnings	75,171.32	19,781.53
Unrealised Capital Gain/Loss	37,277.50	30,496.79
Total Member's Funds	1,512,869.91	1,400,421.09

Notes to the Financial Statements
Australasian Systematic Botany Society Incorporated
For the year ended 30 June 2024

1. Summary of Significant Accounting Policies

The financial report is a special purpose financial report prepared in order to satisfy the financial reporting requirements of the members. The Council has determined that the Society is not a reporting entity.

The financial report has been prepared in accordance with the requirements of Australian Accounting Standard AASB 1031: Materiality. No other applicable Accounting Standards, Australian Accounting Interpretations or other authoritative pronouncements of the Australian Accounting Standards Board have been applied.

The financial report has been prepared on a cash basis.

The following specific accounting policies, which are consistent with the previous period unless otherwise stated, have been adopted in the preparation of this financial report.

(a) Membership

Membership fees are recorded on a cash basis.

(b) Income Tax

Under present legislation the Society is exempt from income tax and accordingly no provision has been made in the accounts.

(c) Comparative Figures

Where required by Accounting Standards comparative figures have been adjusted to conform with the changes in presentation for the current year.

(d) Members Funds

In accordance with the rules of the Society, accumulated funds are not available for distribution to its members.

Research Committee

The Australasian Systematic Botany Society is an approved research institute and is registered as a charity by the Australian Charities and Not-for-profits Commission.

The approved membership of the Research Committee comprises:

John Clarkson	<i>Ex officio</i>
Benjamin Anderson	Appointed May 2022
Janet Gagul	Appointed May 2022
Peter Heenan	Appointed May 2022
Murray Henwood	Appointed March 2016
Sarah Mathews	Appointed March 2015
Jennifer Tate	Appointed May 2022

**Statement by the Members of the Council
Australasian Systematic Botany Society Incorporated
For the year ended 30 June 2024**

The Council has determined that the Society is not a reporting entity and that this special purpose financial report should be prepared in accordance with the accounting policies outlined in Note 1 to the financial statements.

In the opinion of the Council:

1. The financial report as set out on pages 1 to 6 presents a true and fair view of the Society's financial position as at 30 June 2024 and its performance for the year ended on that date.
2. At the date of this statement, there are reasonable grounds to believe that the Society will be able to pay its debts as and when they fall due.

This statement is made in accordance with the resolution of the Council and is signed for and on behalf of the Council by:

President 
Katharina Nargar – President

Treasurer 
Mike Bayly – Treasurer

Dated this 28th day of November 2024

Appendix 2

Auditor's Report



**INDEPENDENT AUDITOR'S REPORT
TO THE MEMBERS OF
AUSTRALASIAN SYSTEMATIC BOTANY SOCIETY INCORPORATED**

We have audited the accompanying financial report, being a special purpose financial report, of Australasian Systematic Botany Society Incorporated, which comprises the Balance Sheet as at 30th June 2024, the statement of Income and Expenditure for the year then ended, Notes and the Members Statement.

Officers' Responsibility for the Financial Report

The officers of Australasian Systematic Botany Society Incorporated are responsible for the preparation and fair presentation of the financial report and have determined that the basis of preparation described in Note 1, is appropriate to meet the requirements of the Australian Charities and Not for Profits Commission and is appropriate to meet the needs of the members. The officers' responsibility also includes such internal control as the officers determine is necessary to enable the preparation and fair presentation of the financial report that is free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on the financial report based on our audit. We have conducted our audit in accordance with Australian Auditing Standards. Those standards required that we comply with relevant ethical requirements relating to audit engagements and plan and perform the audit to obtain reasonable assurance whether the financial report is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial report. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial report, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the officers, as well as evaluating the overall presentation of the financial report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

BHT PARTNERS (AUDIT) PTY LTD ACN 113 241 919 ABN 28 113 241 919

TAU ASS001 L8

Level 1, 963 Main Road, Eltham, PO Box 588 Eltham 3095
Tel: 03 9431 1827 Email: enquiries@bhtaudit.com.au Web: www.bhtaudit.com.au
Directors: M.L. McALLISTER FCPA • A.P. GIROLAMI CPA • B.J. MARSHALL CPA

Liability limited by a scheme approved under professional standards legislation

Independence

In conducting our audit, we have complied with the independence requirements of the Australian professional accounting bodies.

Matters relating to the electronic presentation of the audited financial report

The auditor's report relates to the financial report of *Australasian Systematic Botany Society Incorporated* for the year ended 30th June 2024 included on *Australasian Systematic Botany Society Incorporated* website. The association's officers are responsible for the integrity of *Australasian Systematic Botany Society Incorporated* website. We have not been engaged to report on the integrity of *Australasian Systematic Botany Society Incorporated* website. The auditor's report refers only to the statements named above. It does not provide an opinion on any other information which may have been hyperlinked to / from these statements. If users of this report are concerned with the inherent risks arising from electronic data communications they are advised to refer to the hard copy of the audited financial report to confirm the information included in the audited financial report presented on this website.

Opinion

In our opinion, the financial report presents fairly, in all material respects, the financial position of *Australasian Systematic Botany Society Incorporated* as of 30th June 2024 and of its financial performance for the year then ended in accordance with the financial reporting requirements of ACNC.

Basis of Accounting

Without modifying our opinion, we draw attention to Note 1 to the financial report, which describes the basis of accounting. The financial report has been prepared to assist *Australasian Systematic Botany Society Incorporated* to meet the requirements of ACNC. As a result, the financial report may not be suitable for another purpose.



.....
Melinda McAllister
Registered Company Auditor

BHT Partners (Audit) Pty Ltd
Level 1, 963 Main Road
ELTHAM VIC 3095

Date: 12/11/2024

Student / ECR Subcommittee report

Patrick Fahey on behalf of SECR representatives Paulo Souza Baleeiro, Helen Kennedy (outgoing) and Andrew McDougall (outgoing)

The Student and Early Career Researcher (SECR) Subcommittee was formed in August 2021 to address a need for greater representation of SECRs on council. The subcommittee regularly meets to discuss issues relevant to SECRs, participate in council meetings and develop initiatives aimed at engaging and assisting SECR members of the Society. It has also proved itself an effective channel for SECRs to move into other official roles within the society, with Tim Collins (Secretary) and Helen Kennedy (Newsletter Editor) being previous members who have moved directly into other roles on leaving the subcommittee.

The subcommittee will once again see substantial turnover in 2025, with Helen Kennedy reaching the end of the three-year term, and thus stepping across to be Newsletter Editor, and Andrew McDougall stepping aside after one year on the subcommittee to focus on his studies. Patrick Fahey and Paulo Souza Baleeiro will continue as members, leaving two open seats on the subcommittee, which can consist of up to four SECR representatives. A call for nominations for these seats closed on Monday December 9th and we anticipate being able to announce the new subcommittee to the society in the coming weeks.

In 2024, SECR subcommittee members participated in the quarterly council meetings representing the perspectives of the SECR community. With no ASBS conference this

year, the largest event on the calendar was the IBC held in July in Madrid. Andrew McDougall attended this conference and took on the task of organising a dinner for ASBS SECRs who were also in attendance. After some initial complications regarding venues, by all reports the gathering was a great success.

With the new website going live, a key initiative for the SECR subcommittee moving into 2025 is to better understand what proportion of the Society membership consider themselves SECRs (defined in the subcommittee's terms of reference as current students and those less than 10 years post their studies). Members of the Society are thus encouraged to check they have specified their career stage and nominated to join the SECR register on their profile on the society's website.

In 2025, the subcommittee has identified the need for a review of our Terms of Reference, which are now four years old, a time in which learnings have been made regarding the optimal function of the subcommittee. Additionally, we aim to increase communication with the SECR membership of the society, by providing updates on issues relevant to SECRs, notifications of career opportunities and hopefully an open meeting for SECRs to attend and provide feedback on their priorities.

As always, feedback and collaboration are very welcome.

Newsletter report

John Clarkson, ASBS Newsletter Editor

Three newsletters were published in 2024 and the December issue should appear on time. This year marked a significant anniversary with the 200th issue produced in June.

This year, there have been a number of changes to the editorial team. Lizzy Joyce, who produced

14 issues between June 2020 and March 2024, announced at the 2023 AGM in Canberra that she wished to step down as editor. She committed to producing the December issue (#197). This ran over time and was published as a double issue (#197-198) in March this year. Council's search for someone to take over from Lizzy was not fruitful

so, with the 200th issue scheduled for September, I offered to take over on a temporary basis to ensure this milestone would be met. As a member of the Student and Early Career Researcher Subcommittee, Helen Kennedy attends on-line council meetings. As she was nearing the end of her PhD studies, she indicated an interest in the editor's position. I invited her to join me as a co-editor for #200. I'm pleased to say Helen has since offered to take on the job full time. I have offered to remain as book review editor while Helen settles into the role.

Todd McLay has indicated that he would like a break from producing his regular "In the News" column. Todd took over this popular column from Robyn Barker in June 2020. Thank you very much for your efforts Todd. Sincere thanks also go to Kelly Shepherd who took on the task of mastering Adobe InDesign to ensure the high standard of formatting the Newsletter remained when Lizzy stood down.

Members are thanked for their contributions. It makes the editor's job a whole lot easier if they don't have to chase copy. There was a steady stream of unsolicited contributions this year.

For 50 years, the Newsletter has been an important archive of the Society's history. It has been the goto place to locate minutes of Annual General Meetings, reports on conferences and associated field trips and workshops. It has also included reports of what's happening in official decision-making bodies; news of activities or events in other parts of the country (and the world); commentary on current issues; reviews of published works and books; and has provided a forum for publishing information that isn't suitable for refereed journals. Members have told me that they enjoy reading it.

Before the widespread availability of email and the internet, correspondence with the ASBS membership was almost exclusively via the Newsletter and snail mail. The Newsletter was the medium by which notices such as the dates for Annual General Meetings were announced. This explains the four-month lead time required for things like giving notice of meetings and calling for nominations for Council. This was only changed

in 2023. By then notices were routinely being emailed to members.

In 2001, the first downloadable issue of the Newsletter (#108) was placed on the ASBS web site (Barker & Barker 2001). Because of change of editors and delays in printing, the on-line version was available before the printed copy. Now all issues of the Newsletter are available on-line and the web copy appears well before the print copy. The on-line copy has the added advantage of appearing in colour.

At the 23rd AGM held in Sydney in December 2001, members were asked to consider foregoing hard copy and taking the newsletter in digital format (Barker 2001). The same membership fee would apply whatever form the member took the Newsletter. The issue of discontinuing the Newsletter in hard copy has been the subject of Council discussions from time to time.

A number of years ago a decision was made to no longer offer hard copy to new members as they joined the Society and to phase out the hardcopy offering by natural attrition. Now only 21% of the membership receive the printed version of the Newsletter. Sixty-eight copies of the last issue (#200) were sent by mail. Eighteen of these went to institutional members. This included the major herbaria in Australia and New Zealand who receive the Newsletter for free and four fee paying institutional members (MO, G, B and the State Library of New South Wales).

Council has once again been discussing the value of continuing to produce a printed version. One of the issues under consideration is the cost associated with producing a printed version, particularly in light of the added costs of running the new website. Table 1 presents the costs associated with producing the last 3 issues in hard copy. The number of pages in each issue has a marked influence on the cost. Of the 68 copies of the September issue, 12 were sent overseas. These 12 accounted for about 50% of the postage costs. Postage is foreshadowed to increase in July next year.

Beside the cost, there are other issues associated with production of the Newsletter in hard copy.

Table 1. Comparative costs associated with producing the last three issues in hard copy

Number	Pages (inc. cover)	Number Printed	Printing Cost	Postage Costs	Total
197-98	64	80	\$953	\$330	\$1,283
199	28	80	\$595	\$308	\$903
200	56	75	\$738	\$392	\$1,130
Total			\$2,286	\$1,030	\$3,316

It is extra work for the editor as the pdf has to be reformatted for the printer and pages have to be in multiples of four to avoid blank pages. The Adobe Software package used to format the Newsletter is expensive and not all editors have access to a corporate licence. The last annual subscription for Adobe In Design was €767.84 (AU\$1,231). Finally, the hard copies have to be packed, addressed and posted. We currently use a printer based in Cairns.

Council is suggesting the following:

- Continue to produce four issues per year (March, June, September, December)
- Discontinue the printed copy after the December 2024 issue (#201)
- Produce a pdf version that can be downloaded from the website and printed.

The new editor, Helen, is also considering reformatting the layout of the Newsletter that might make formatting easier.

It's been good while it lasted and 201 is not a bad innings.

References

Barker R. (2001). Newsletter and Web Page Report, Minutes of the 23rd Annual General Meeting. *Austral. Syst. Bot. Soc. Newslett.* **109**: 5.

Barker R. and Barker W.R. (2001). Editorial. *Austral. Syst. Bot. Soc. Newslett.* **109**: 11-12.



The format of the ASBS newsletter has evolved several times since its inception, and we look forward to seeing the next version.

Research committee report

John Clarkson, Vice President and Chair, ex officio, of the ASBS Research Committee

The Society funds its program of research grants and fellowships from income derived from money held in the Research Fund— primarily income derived from funds invested in Colonial First State. Income can vary year on year depending on the financial situation prevailing at the time but, since 2018, the Society has been able to commit AU\$40,000 annually. This is split between two rounds of Hansjörg Eichler Grants, one offered in March and one in September, and the Marlies Eichler Postdoctoral Fellowship offered in July. A brief history of the Research Grants was published in 2022 (Clarkson 2022).

Applications for grants are assessed by a Research Committee comprising (Figure below from L to R):

- Ben Anderson, Western Australian Herbarium
- Janet Gagul, University of Papua New Guinea
- Sarah Matthews, Louisiana State University
- Peter Heenan, Manaaki Whenua – Landcare Research
- Jen Tate, Massey University



Hansjorg Eichler Grants

The Hansjörg Eichler Scientific Research Grants are offered for research projects focused on the systematics of land plants, algae or fungi. This can include studies of taxonomy, phylogeny and biogeography. All ASBS members can apply, however, students, recent graduates, newly established botanists and non-salaried researchers are given preference. The grant can be used to fund consumables, travel and other costs associated with fieldwork, contracted services such as DNA sequencing, etc. Large capital items, the publication of journals and books, and the attendance at research conferences cannot be funded by this grant. The maximum grant awarded is AU\$5,000.

Five applications for Hansjorg Eichler Grants were received in the March round. The successful applicants were:

- Charlotte Nelson, a BSc (Hons) student from UWA, who was awarded AU\$3,200 for her study of the phylogenetic placement and population genetics of a new peatland endemic species, *Haemodorum* sp. (East Northcliffe), based on a molecular assessment.
- Riyad Hossen, a PhD student from MELU, who was awarded AU\$5,000 for a study reassessing the lineage relationships in Bryopsidales algae through phylotranscriptomics.
- Tara Evans, a PhD student from ADU, who was awarded AU\$2,440 for a project entitled "The identification of fossil *Brachychiton* leaves and their significance in reconstructing the evolutionary history of the genus".

Four applications were received in the September round. One grant was awarded:

- Yuqun Du, a PhD student from MELU, who was awarded AU\$5,000 to help her resolve the taxonomy and diversity of Pterosiphoniaeae, a taxon-rich tribe within the red algal family Rhodomelaceae.

A number of applications received this year lacked the focus on the systematics of land plants, algae or fungi required for grants from the Hansjörg

Eichler Research Fund and were deemed ineligible for funding.

Marlies Eichler Postdoctoral Fellowships

Marlies Eichler Postdoctoral Fellowships are designed to support research in systematic botany and the career development of recent PhD graduates by providing top-up funds to researchers already successful in attracting other postdoctoral support. The Fellowship offers a maximum of AU\$20,000 over the two years with up to AU\$10,000 each year. Funds can be spent on salary for the applicant or project costs (including consumables, essential minor equipment <AU\$5,000, travel associated with fieldwork, contracted services such as DNA sequencing, and technical assistance).

Such top-ups are considered useful because many postdoctoral schemes are not fully funded, in terms of either salary or research costs. Providing strategic support to already successful early career systematists aims to facilitate quality research and to help recent graduates to capitalise on postdoctoral opportunities and improve their competitiveness for more permanent positions.

Dr Lalita Simpson from the Australian Tropical Herbarium in Cairns is in the second year of her Fellowship examining the taxonomy and conservation genomic assessments of threatened orchids.

The 2024 Fellowship was awarded to Dr Caroline Puenta-Lelievre from the School of Biological Sciences, University of Auckland. Caroline's research is aimed at filling the gaps in the phylogeny of the Epacridoideae. Caroline is the first fellow to be based in Aotearoa (New Zealand).

The Future

Because ASBS is endorsed as a deductible gift recipient by the Australian Taxation Office, the Society is required to appoint a Research Committee consisting of not less than five (5) persons qualified to advise on matters of systematic botany. The appointment of such persons is dealt with by the Society's Rules (38.2). Because Peter Heenan will be elected Vice President at the AGM,

he will assume the role of Chair of the Research Committee. This will mean that there will be only 4 members of the Research Committee. Over the next few months the Council will be seeking members willing to join the committee.

References

Clarkson, J. (2022). In the beginning: A brief history of ASBS research grants. *Austral. Syst. Bot. Soc. Newslett.* **191**:29-34.

Webmasters' report

Anna Monro & Kelly Shepherd, ASBS Webmasters

The new [ASBS website](#) was successfully launched just over 12 months ago. It is now hosted by the Melbourne based company [Silvercode](#) on a Wordpress instance, after transitioning from the old site previously managed by the Australian National Botanic Gardens (ANBG).

Besides plenty of new content, the most significant change to the website has been the implementation of WooCommerce self-service functionality to allow online membership registration and management including the option for automatic payments of membership subscriptions and donations. By 6 November 2024, online payments processed via the website totalled \$8,520.00 in memberships (231 membership orders) and \$115,805.00 in donations (42 donation orders).

Transitioning all members into this system at once was challenging and we acknowledge it wasn't seamless for everyone. We thank members for their patience, and we are immensely grateful to the Treasurer, Mike Bayly, who helped various members sort out their online payments. For those that have chosen the automated renewal of subscriptions, we anticipate that everything will go smoothly in the New Year. While subs are due on 1 January 2025, we have selected 14 January as the date on which charges will be made to credit cards, to give members time to update their information (if required) before any payments go through. If you haven't set up automatic payments already, you can easily do so through your account dashboard. Don't forget to also consider making a tax-free donation to ASBS!

There were c. 4433 unique visitors to the website with peaks of activity at the time of launch, when memberships were due in early January, and before the end of the financial year (possibly due to the Treasurer encouraging remaining unfinancial members to pay their subscription). The top five countries for visitors were the USA, Australia, China, New Zealand and the Philippines.

New content updated over the year included the addition of the latest awardees for grants, four blog posts, and three newsletter issues (197/198, 199, 200), as well as some editorial changes to general content. As part of the hosting contract with Silvercode, ASBS has one hour of free support every month. This is ably provided by Steph Hunter, who has been very responsive to any requests. As part of the website development Steph also produced several training videos to allow the webmasters to learn some basic skills to update content themselves. Kelly bravely managed to do some content changes (with only one unsettling update that caused the format of some pages to go a little haywire: this was promptly rectified by Steph, who also explained how to avoid a similar problem in the future!).

The website will only remain an interesting and dynamic online home for the Society if members engage to provide new content. Therefore, we really encourage you to submit any new images or blog posts (Figure 1) about stories of interest.

Please get in touch via webmaster.asbs@gmail.com if you have any feedback about the website or require further information on content creation.

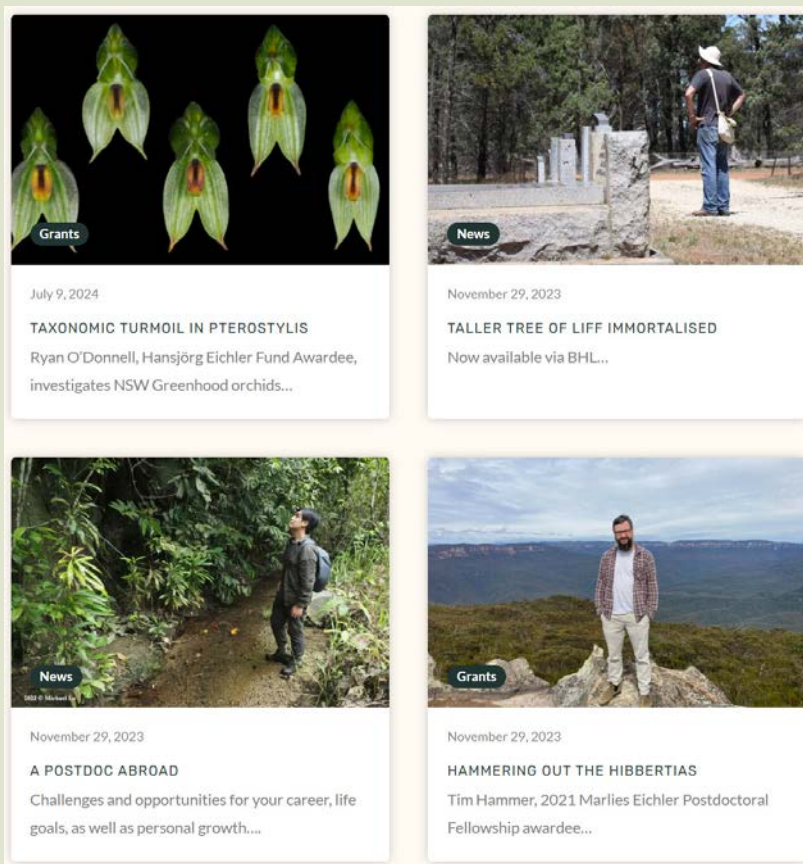


Figure 1. [ASBS website](#) blog posts

Facebook report

Mike Bayly, ASBS Webmasters

The ASBS Facebook group, now about eleven and a half years old, has grown from 1946 members in November 2023 to 2128 members in November 2024. The group is 'public', which means anyone can see the group, its members and posts, but only people in the group can post to the page.

There were 128 posts to the group since the last AGM, soliciting 2554 'reactions' and 199 comments from group members. We thank all regular contributors for keeping the group lively. Some particularly active members this year were Karen Wilson, Tanya Scharaschkin, Jeremy Bruhl, Tim Hammer and John Clarkson.

With changes to Facebook rules in 2022, membership to the group is unvetted, but we

changed the group settings last year, so that the ability to post content requires manual approval. We also added some membership questions to help the approval process and to help separate the spammers from those who are genuinely interested in botany. This has led to a reduction in the number of spam posts getting through, but it does mean that some genuine members might wait a while to have posting rights approved. Despite the tightened security, some spam will still get through, and we ask members to report problematic content to us so that we can remove it promptly.

The Facebook group is a great way for the dispersed members of our society to keep in touch and discuss our common interests. If you are on Facebook and haven't yet joined our group, you should!

Research Grants

John Clarkson, Vice President and ex officio Chair of the ASBS Research Committee

Hansjörg Eichler Scientific Research Fund

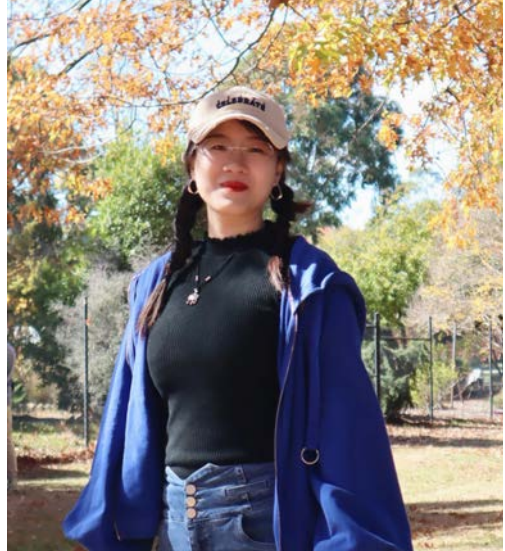
Four applications were received in the latest round. Council is pleased to announce the following successful applicant.

Yuqun Du, a PhD student from the School of Biosciences at the University of Melbourne for her project proposal:

‘Resolve the taxonomy and diversity of Pterosiphoniae in Australasia.’

Yuqun plans to sequence plastid genomes of Pterosiphoniae for 25 samples to build well-resolved phylogeny and investigate the biodiversity of Pterosiphoniae in southern Australia.

Amount awarded AU\$ \$5,000



Northern Territory Herbarium News

Nick Cuff, Chief Botanist, Northern Territory Herbarium

Staffing

The past few years have seen significant changes at the Northern Territory Herbarium, both at our Darwin (DNA) and Alice Springs (NT) facilities, with many new staffing appointments.

Following the retirement of Ian Cowie and then the departure of Peter Jobson to the National Herbarium of New South Wales, the position of Chief Botanist of the Northern Territory Herbarium was vacant for a period. Nick Cuff was appointed Chief Botanist, returning to the Northern Territory after 18 months working for the Queensland Herbarium based at the Australian Tropical Herbarium (CNS).

Dave Albrecht also returned to the Northern Territory as Senior Botanist in Alice Springs, after his time at the Australian National Herbarium (CANB). Many of you will be familiar with Dave's name from his previous work as a botanist in Alice Springs until the early 2010s. His extensive experience and continued contributions to

botanical knowledge in arid central Australia will be invaluable in highlighting the importance of herbarium collections for assessing and managing the flora of the Northern Territory.

Sarah Hirst, our Collection Manager, retired in early 2023. During her time at DNA, Sarah managed a large-scale refurbishment of the facility, extending our capacity and ensuring the longevity of the current location. Aiden Webb has since been appointed to the position. Aiden joins us from The University of Melbourne, where he completed a Master's degree focused on the Asparagales (*Caesia*).

Lou Elliot has been appointed Botanist at DNA. Lou brings with him extensive knowledge of the naturalised flora of the Northern Territory from his previous role with the Department of Lands, Planning and Environment's Weed Management Branch. He has also contributed to the development of the national network of 'weed botanists' based at jurisdictional herbaria around Australia.

Research associates

In 2021, the Northern Territory Herbarium introduced an Honorary Titles Policy through the then Department of Environment, Parks and Water Security. This policy allows for the formal recognition and support of past staff and collaborators who continue to contribute to the development and curation of the NT Herbarium collection and botanical knowledge in the region.

Ian Cowie was the first to be appointed under this policy in 2022, after his retirement. Ian has continued to make significant contributions to the herbarium in this role, for which we are incredibly grateful, while also dedicating time to his taxonomic interests.

Four new research associates were recently appointed across both facilities in recognition of their ongoing contributions:

- Dr David Liddle – Former threatened plant botanist with the Department (retired 2018).
- Dr Greg Leach – Former Director of the Northern Territory Herbarium (retired 2011).
- Kym Brennan – Former scientist with the Department (retired 2018) and significant contributor to the DNA collection.
- Peter Latz – Eminent botanist who worked across the Northern Territory Government for many decades (retired in the early 2000s).

We look forward to continuing our collaboration with these researchers to further our understanding of the Northern Territory's flora.



Lou Elliott on the left undertaking training in Mary River National Park with Ranger Max Werner.

Imaging capability

In early 2024, a failure in the computer hardware associated with our high-resolution imaging system temporarily disrupted our ability to image specimens. Fortunately, we were able to secure capital funding for a new reprographic camera system, which will restore this capability. The new system—a 150 MP Phase One camera—will be similar to those used in other national herbaria and is expected to be installed in early 2025.

This new equipment will allow us to clear a backlog of unimaged type specimens and begin developing workflows for digitizing and delivering larger parts of our collection. We will also be able to fulfill imaging requests that have been on hold for the past year.

Research

In July, DNA hosted Brendan Lepschi from CANB as part of the Council of Heads of Australasian



Aiden Webb at Finke Gorge

Herbaria (CHAH) Curation Exchange program. Brendan worked across several groups, most notably *Melaleuca*. He provided significant professional development to staff, imparting his wealth of experience across various plant families and collection management.

Both DNA and NT have hosted visits from or worked in collaboration with botanists from around the country over the past year, including

- Ben Anderson – Asteraceae
- Tony Start – Mistletoe book project
- Juliet Wege – Stylidiaceae
- Australian Tropical Herbarium (small grants scheme) – *Garcinia warrenii* molecular study
- Sam Craig – *Gossypium* (Cotton)
- Heidi Zimmer and Mark Clements – Orchidaceae
- Matt Dell – Bryophytes

As well as active involvement in taxonomic projects across a number of groups including:

Goodenia, *Olearia*, *Hydrocotyle* (Dave A), *Tricoryne*, *Haemodorum*, *Caesia* (Aiden W.), Poaceae (Lou E.), *Tephrosia* (Ian C.), *Eriocaulon* (Greg L.), *Stylidium* (Kym B.), *Acacia*, *Typhonium*, *Cleome* (Nick C.) and *Schoenus* (Ian C. and Nick C.). We look forward to furthering these studies in collaboration with our peers both locally and interstate in the coming year!

Many of you will be interested to know that The Northern Territory Herbarium published a new edition of the *Checklist of Vascular Plants of the Northern Territory*, the first update to the compiled list since 2017. This is available on the Flora NT Website as a downloadable [PDF](#) (select 'download pdf').

Fieldwork

This year has been particularly productive for fieldwork. Two notable surveys have contributed to our growing understanding of the Northern Territory's flora:

- MacDonnell Ranges Threatened Species Surveys – Conducted in collaboration with the Department of Species Management and Parks and Wildlife Commission staff.

• Resurvey of Long-term Monitoring Sites in Kakadu National Park – A joint effort with staff from Parks Australia, Charles Darwin University, and Traditional Owners across various sites in the park.

These surveys yielded significant new specimens and records (and potential taxonomic

conundrums!) that contributed to the development of the herbarium collection.

The New Year, 2025, is shaping up to be a busy year in the north with a number of potentially large field expeditions in the planning stage but more on those in future updates!

Two Books, Two Days, Two States

John Clarkson and Karen Wilson

On November 14, the latest book from the prolific pen of ASBS member David Mabberley, *Citrus: A World History*, was launched in the Gardens Gallery (on Level 2 of the Robert Brown Building, formerly the home of NSW) at the Royal Botanic Gardens, Sydney, organised by the Foundation and Friends of the Botanic Gardens. The lavishly illustrated book traces the history of citrus from ancient civilisations to the present threat posed by Huanglongbing (Citrus greening disease). At the launch, David told us that his interest in *Citrus* was serendipitous. It developed from preparing the treatment of that genus for the *Flora of Australia* vol. 26 (2013), which he wrote because his treatment of the family Meliaceae (in the same volume) was being held up because no-one wanted to tackle *Citrus*. Serendipity indeed!

Two days later the Vera Scarth-Johnson Gallery Association hosted a launch of a revised second edition of Vera Scarth-Johnson's *National Treasures: Flowering Plants of Cooktown and Northern Australia* in Nature's Powerhouse in the historic Gallop Botanic Gardens in Cooktown. *National Treasures* features 145 reproductions

of Vera's botanical illustrations, mostly of plants collected by Joseph Banks and Daniel Solander in the vicinity of the Endeavour River in 1770. Vera's original art works were gifted to the people of Cooktown and are on permanent display in Nature's Powerhouse. The launch was attended by several current and past ASBS members.

Reviews of both books will appear in a future issue of this Newsletter.

Citrus: A World History

David J. Mabberley

Thames and Hudson, London

Hard cover; 271pp.

ISBN: 978-0-500-02636-6

National Treasures: Flowering Plants of Cooktown and Northern Australia

Vera Scarth-Johnson

Vera Scarth-Johnson Gallery Association, Cooktown

Soft cover; 174 pp.

ISBN: 978-0-646-70134-9



Left: David Mabberley and Peter Thomas, CEO of the Foundation and Friends of the Botanic Gardens, at the launch of *Citrus: A World History*. Right: John Clarkson, Tony Roberts and Bob Jago at the launch of *National Treasures*.

‘Twice as thick as a hog’s bristle’ and other irregular units of measure

John M. Huisman, WA Herbarium

Taxonomists are often delving back into historical literature, hoping to gain insights based on the original descriptions of species. Prior to the general adoption of the smaller units of the metric or imperial systems, botanists used traditional units related to human body parts or other natural objects. This relationship can also be seen in the historical development of units, the ‘foot’ being perhaps the more obvious. The ‘inch’ was originally the width of the human thumb, but was decreed by King Edward II of England in 1324 to be the length of ‘three grains of barley, dry and round, placed end to end, lengthwise’. When botanists required a smaller unit, the ‘line’ was used, which was $\frac{1}{4}$ the length of a barleycorn (i.e., $\frac{1}{12}$ of an inch or 2.12 mm). This attempt at standardisation (the British line) was hampered by a competing measure, the Paris line, which is slightly larger at 2.25 mm (see Stearn, 1992, who gave approximate lengths for a variety of measures based on the human body).

Despite heeding the warning of Klein (1974), ‘the confusions and contradictions of historical unit usage defy the most ingenious present-day attempts to harmonize them or to explain them away’, I have, for no other reason than my own amusement and with no claims to accuracy, endeavoured to establish measurements of other historical units used in phycological literature. These have mostly been taken from Dawson Turner’s ‘Fuci’ (1809, 1811) but also the writings of William Henry Harvey, everyone’s favourite nineteenth-century phycologist. As most of these related to the thickness of bird quills, I initially consulted Dr Lukas Jenni of the Swiss Ornithological Institute, the author of the seminal ‘Determinants and constraints of feather growth’ (Jenni *et al.*, 2020). That paper (and references therein) gave measurements of some, but not all the species of interest. Dr Jenni, who was unaware of this botanical usage, then pointed me in the direction of various online feather resources, of which ‘Featherbase’ (<https://www.featherbase.info/en/home>) not only gave numerous images of feathers, but provided the tools to measure

their components. As the most likely ‘standard’ feathers were those used for writing until the mid 19th century, I selected the largest and most robust for measurement. One non-bird-related example is that of Harvey, who in 1855 described the frond of *Asparagopsis armata* as being ‘twice as thick as a hog’s bristle’ (Figure 1). For this I initially consulted the literature (Jiang *et al.*, 2021), however as that study only assessed immature animals (bristle diameter 18–49 μm) I also took direct measurements of hog’s bristles removed from an artist’s brush. These were considerably larger at 100–220 μm . Womersley’s (1996) figures of *A. armata* indicates a main branch diameter of c. 500 μm , which is comparable to twice the upper measure, agreeing with Harvey’s statement.

The dimensions of ‘pack thread’ (Turner, 1809) presented some difficulty. As the name suggests, packthread is a strong twine used for tying up packages. As the diameter of twines can vary depending on the intended use, and I was unable to find information regarding historical twines, I took the branch diameters (Womersley, 2003) of one of Turner’s species (*Fucus forsteri*, now in *Laurencia*) and used that as the standard.

Human hair can also vary considerably. Jiang *et al.* (2021) gave 16–42 μm diameter, and my own scalp hair measured a comparable 36–40 μm diameter, however my facial hair was considerably more stout at 100–110 μm diameter. Stearn (1992, pg.111) calculated from Linnaeus’s summary (1751) that a hair’s width was $\frac{1}{12}$ of a Paris line and equal to 0.18 mm (= 180 μm), which seems inordinately robust but obviously an estimate given the limited capacity for fine measurements at the time. Or perhaps that 18th century Europeans had thicker hair, which is beyond my capacity to research. The last decade has seen my own hair becoming thinner, but I will assume that is a density measure, not the actual fibres. My own thumb at 22 mm diameter also falls short of the full inch (25.4 mm), so I’m clearly not ‘standard’.



Figure 1. *Asparagopsis armata*, with fronds ‘twice as thick as a hog’s bristle’.

The following table gives the original phrase, the reference and species of alga described, the scientific names of the source species, and then the range of quill, bristle, or hair diameters, arranged from smallest to largest. Note: For entertainment purposes only.

Table 1. A quick guide to quirky units of measurement in algae.

Unit of measure	Source	Subject (current genus)	Species (unit)	Diameter	Source
‘scarcely thicker than human hair’	Turner 1809	<i>Fucus asparagoides</i> (Bonnemaisonia)	<i>Homo sapiens</i>	16–42 μm	Jiang <i>et al.</i> 2021
‘twice as thick as a hog’s bristle’	Harvey 1855	<i>Asparagopsis armata</i>	<i>Sus scrofa domesticus</i>	18–49 μm ; 70–170 μm	Jiang <i>et al.</i> 2021; artist’s brush
‘thickness of a wren’s quill’	Turner 1809	<i>Fucus hamulosus</i> (Hypnea)	<i>Troglodytes troglodytes</i>	0.61–0.77 mm	Feather-base
‘not thicker than a pack thread’	Turner 1809	<i>Fucus forsteri</i> (Laurencia)	Probably hemp or jute	0.5–1 mm	Womersley 2003
‘thickness of a sparrow’s quill’	Turner 1809	<i>Fucus valentiae</i> (Hypnea)	<i>Passer domesticus</i>	0.897–1.032 mm	Zeidler 1966

'thickness of a blackbird's quill'	Turner 1809	<i>Fucus membranifolius</i> (Phyllophora)	<i>Turdus merula</i>	1.56–1.83 mm	Feather-base
'half a line wide'	Turner 1809	<i>Fucus myagroides</i> (Myagropsis)	Barley	2.25 mm	Stearn 1992
'as thick as a blackbird's or crow's quill'	Turner 1809	<i>Fucus ovalis</i> (Gastroclonium)	<i>Corvus corone</i>	3.56–4.31 mm	Jenni <i>et al.</i> 2020
'as thick as a small goose quill'	Turner 1809	<i>Fucus agarum</i> (Agarum)	<i>Anser anser</i>	3.6–5.4 mm	Feather-base
'as thick as a swan's quill'	Turner 1811	<i>Fucus cabrera</i> (Carpomitra)	<i>Cygnus olor</i>	7.79–7.85 mm	Mathiasson 1973
'that of a finger'	Turner 1809	<i>Fucus pyriferus</i> (Macrocystis)	<i>Homo sapiens</i>	16.2–20 mm	Self

References

- Harvey, W.H. (1855). Some account of the marine botany of the colony of western Australia. *Transactions of the Royal Irish Academy* **22**: 525–566.
- Jenni, L., Ganz, K., Milanesi, P. & Winkler, R. (2020). Determinants and constraints of feather growth. *PLOS ONE*. **15**. e0231925. 10.1371/journal.pone.0231925.
- Jiang, Y., Zou, Q., Liu, B., Li, S., Wang, Y., Liu, T. & Ding, X. (2021). Atlas of Prenatal Hair Follicle Morphogenesis Using the Pig as a Model System. *Front. Cell Dev. Biol.* **9**: 721979.
- Klein, H.A. (1974). *The world of measurements : masterpieces, mysteries and muddles of metrology*. Simon & Schuster, New York.
- Linnaeus, C. (1751). *Philosophia botanica, in qua explicantur fundamenta botanica cum definitionibus partium, exemplis terminorum, observationibus rariorum, adjectis figuris aeneis*. G. Kieseewetter, Stockholm.
- Mathiasson, S. (1973). A moulting population of non-breeding Mute Swans with special reference to flight-feather moult, feeding ecology and habitat selection. *Wildfowl* **24**: 43–53.
- Stearn, W.T. (1992). *Botanical Latin*. 4th edition. Newton Abbot : David & Charles.
- Turner, D. (1809). *Fuci sive plantarum fucorum generi a botanicis ascriptarum icones descriptiones et historia*. Vol. II. Londini [London]: typis J. M'Creery, impensis J. et A. Arch.
- Turner, D. (1811). *Fuci sive plantarum fucorum generi a botanicis ascriptarum icones descriptiones et historia*. Vol. III. Londini [London]: typis J. M'Creery, impensis J. et A. Arch.
- Womersley, H.B.S. (1996). *The marine benthic flora of southern Australia - Part IIIB - Gracilariales, Rhodymeniales, Corallinales and Bonnemaisoniales*. Canberra & Adelaide: Australian Biological Resources Study & State Herbarium of South Australia.
- Womersley, H.B.S. (2003). *The marine benthic flora of southern Australia - Part IIID Ceramiales - Delesseriaceae, Sarcomeniaceae, Rhodomelaceae*. Canberra & Adelaide: Australian Biological Resources Study & State Herbarium of South Australia.
- Zeidler, K. (1966): Untersuchungen über Flügelbefiederung und Mauser des Haussperlings (*Passer domesticus* L.). *Journal of Ornithology* **107**: 113–153.

Far from Decorative Prints

Book review by John Clarkson, Topaz

Proof engravings prepared for Sir Joseph Banks from plant engravings made by Sydney Parkinson on James Cook's Endeavour voyage. Memoirs of the Peter Crossing Collection No. 1

David J. Mabberley

ISBN: 978-0-6485982-2-0 (hardback) 300 x 240 mm

Peter Crossing AM, 2024, pp. 86

Copies available by email request to: peter@crossing.com.au

AU\$55 plus packaging and postage



Over the past 3 decades, Peter Crossing has amassed a unique private collection of books, drawings, manuscripts and ephemera focussed on the early European understanding of Australia's flora. In 2017, he appointed his friend, David Mabberley, to bring

order and context to the collection. The result, as I pointed out in a review of David's illustrated catalogue of the collection published in 2022 (Clarkson 2023), is an outstanding partnership between a lover of books with the means to acquire them and a scholar with the necessary skills to fulfil Peter's request. As this current book illustrates, the partnership continues to flourish.

Just before *The Peter Crossing Collection: An Illustrated Catalogue* (Mabberley 2022) was published, but too late for more than a note in the catalogue (page 325), Peter acquired 32 proof pulls from engravings prepared by Sir Joseph Banks from drawings made by Sydney Parkinson on James Cook's Endeavour voyage (1768-71). The prints had been in the possession of a bookseller in Gothenburg who had had them disbound and was preparing to sell them individually as decorative prints. Thankfully, a Swedish scholar, knowing David Mabberley's involvement with engravings of Solander's work (Mabberley 2017), drew this to David's attention before the set could be broken up in this way. From images of the engravings sent to The Peter Crossing Collection, it became apparent that the prints were part of a small number of proof engravings sent by Joseph Banks to colleagues on the Continent around 1782. After considerable negotiations with the vendor, Peter Crossing was able to acquire them for his collection. In his foreword to the book, Peter says that he considers the engravings to be some of the most important items in his collection and that they warranted a separate publication with full documentation and supporting research findings. The task fell to David Mabberley, the curator of the Crossing Collection. This this book is the result.

The history of Banks' unfulfilled plan to publish the botanical results of the *Endeavour* voyage is discussed in a fascinating 13-page introductory chapter. Here, the readers are introduced to the artists and engravers engaged by Banks to prepare Parkinson's drawings and paintings for printing and to the fate of their labours which, except for three proof sets made for Banks himself, languished in the Natural History Museum,

London for over a century. Banks gifted the proof sets he had produced to several colleagues in continental Europe. In tracing the current whereabouts of these, Mabberley has established the provenance of the works in the Crossing Collection strongly linking them to the set gifted to the Alströmer family based in Sweden. Twelve of the plants were collected in Australia (seven from Botany Bay, four from Endeavour River and one from Lizard Island) together with nine from Chile, three from Brazil, two from Tahiti and six from New Zealand. Only two places visited on the voyage (Madeira and Java) are not represented. Of particular interest to Australian botanists is the engraving of *Banksia integrifolia* which is almost certainly the holotype of Linnaeus the Younger's name published in 1782. The thirty-two plates reproduced here are the first of these 18th century first proof pulls to be published and, because they were amongst the first printed, they are crisper and show more fine detail than those printed in the 19th and 20th centuries. Some of the crossing set (e.g. *Codonochis lessonii*) include annotations by Banks and/or Solander indicating amendments to be made to the plates before further printing.

Careful study of stitch marks, water stains and damage to some prints enabled the prints to be reordered as they were in the original bound volume and it is in this order they appear in the book. Each print is presented as a two-page spread with the image on the right-hand page and eclectic notes on each species on the facing page. Beneath each commentary, the name of each plant is given followed by the publishing author, the date and place of publication, the name of the engraver, the size of the plate and the Parkinson work on which the engraving is based. Each print is linked to prints produced in the 19th and 20th centuries (see references) and copies, some uncatalogued, in the Linnean Society of London, the Royal Botanic Gardens Kew and the Natural History Museum London. In doing so it was established that no fewer than 20 of the proof pulls are known only in the Peter Crossing Collection.

As he did with the Illustrated Catalogue, Peter chose to have the book printed and bound in Australia by Sydney based company Carbon8. The look and feel of the book are, once again,

exquisite. It is a wonderful example of what can be achieved by printers in Australia. This is a must have companion to the Illustrated Catalogue which will no doubt be joined by many more memoirs as items are added to The Crossing Collection and research on current holdings progresses.

References

*Alecto Historical Editions (1980–91). *Bank's Florilegium* (743 plates in 35 parts), www.Alecto-historical-editions.com.

Clarkson, J. (2023). Determined to acquire them all. *Australas. Syst. Bot. Soc. Newslett.* **195**: 10–11.

*Diment, J.A., Humphries, C.J., Newington, L. & Shaughnessy, E. (1984). Catalogue of the natural history drawings commissioned by Joseph Banks of the Endeavour Voyage 1768-1771 held in the British Museum (Natural History). Part 1: Botany: Australia. *Bulletin of the British Museum (Natural History), Historical Series* **11**: 1–183.

*Diment, J.A., Humphries, C.J., Newington, L. & Shaughnessy, E. (1987). Catalogue of the natural history drawings commissioned by Joseph Banks of the Endeavour Voyage 1768-1771 held in the British Museum (Natural History). Part 2: Botany: Brazil, Java, Madeira, New Zealand, Society Islands and Tierra del Fuego. *Bulletin of the British Museum (Natural History), Historical Series* **12**: 1–200.

*Gooding, M., Mabberley, D.J. & Studholme, J. (2017). *Joseph Banks' Florilegium: Botanical Treasures from Cook's First Voyage*. Thames & Hudson Ltd, London.

Mabberley, D.J. (2017). The Plates, pp.20–295 in Gooding, M., Mabberley, D.J. & Studholme, J. (2017). *Joseph Banks' Florilegium: Botanical Treasures from Cook's First Voyage*. Thames & Hudson Ltd, London.

Mabberley, D.J. (2022). *The Peter Crossing Collection: An Illustrated Catalogue*. Peter Crossing AM, Greenwich, NSW.

*References to prints produced in the 19th and 20th centuries.

‘Figs and myself’

Book review by Tim Entwisle

My Journey with Australian Native Fig Trees: Bonsai & Botanical Art

Megumi Bennett

ISBN978-1-7636548-0-8

Self-published (designed and printed by Minuteman Press Pittwater), 2024

RRP AU\$49.95

www.megumibennettbonsai.com



Most books are a labour of love – also at times hate, frustration and obligation – but a 20-year gestation is exceptional. Megumi Bennett was planning this book back when I was Executive Director of Botanic Gardens Sydney, in the late noughties, and I suspect from a glint in her eye, it began well before that.

Self-published, eclectic in content but with a whole lot of heart, this is a book for those who, like Megumi, have a somewhat irrational but enduring passion for a particular group of plants (or algae, or fungi). Which I think includes all of us.

My Journey with Australian Native Fig Trees approaches the genus *Ficus* through two of Megumi’s other obsessions in life, botanical art and bonsai. One capturing the essence of a plant in a single, precisely executed rendering of a single branch, the other attempting to capture a whole tree in the smallest possible space. Different ways to spend more time with the plants you love.

To read this book is to spend time with Megumi. The text is very personal, in style and content, starting with a single-page poetic declaration on ‘Figs and myself’. From there we join Megumi on her journey around Australia, to see and paint as many native species of fig as she can. That results in the 34 watercolour paintings that grace the final pages, including all but nine of the Australian species.

In between, we learn something about where figs grow, about their inside-out flowering apparatus and wasp pollinators, as well as the basics of bonsai and bonsaiing figs (Megumi says her next book will be entirely on bonsai).

All up, a beautiful celebration of a life devoted to art, horticulture and figs. Which is pretty much how a former Vice President of ASBS, Dale Dixon, sums it up in his Foreword, recommending this book to anyone with an interest in bonsai or Australian figs. I’d add, anyone who has ever fallen in love with a taxon.

The newsletter

The ASBS newsletter keeps members informed of society events and news, and provides a platform for debate and discussion. The newsletter is published quarterly on the ASBS website and in print. Original articles, notes and letters (not exceeding ten published pages in length) are encouraged for submission by ASBS members.

Have an article or an idea for the newsletter?

Send it to Helen Kennedy at editor.asbsnews@gmail.com

Attribution Photos and text from the newsletter may be reproduced with the permission of the author(s) of the article and must be appropriately cited. All articles are to be attributed to the author(s); any unsigned articles are attributable to the editors. Authors alone are responsible for the views expressed, and statements made by the authors do not necessarily represent the views of the Australasian Systematic Botany Society Inc. The editorial team may make changes to correct spelling and substantially improve syntax or clarity

without recourse to the author. It is the author's responsibility to gain permission for publication and correctly attribute sources.

Advertising Advertising space is available for products or services of interest to ASBS members at the following rates (AUD):

Full page: \$200

Half page: \$100

Flyers: \$250

A 20% discount applies for regular advertisements. ASBS members are exempt from advertisement fees but not insertion costs for flyers (\$50). For advertising enquiries please contact the editor.

Printing Printed by Create Print & Design, Cairns, Queensland, Australia.

The society

The Australasian Systematic Botany Society is an incorporated association of over 300 people with professional or amateur interest in botany. The aim of the society is to promote the study of plant systematics.

Membership is open to all interested in plant systematics. Members are entitled to attend general and chapter meetings, and to receive the ASBS Newsletter. Any person may apply for membership at any time by filling in a membership application form available at <http://www.asbs.org.au/membership/>. Subscriptions become due on 1 January each year.

The ASBS annual membership subscription is AUD \$45, and a concessional rate of AUD \$25 is offered to full-time students, retirees and unemployed people. Payment may be by direct credit, credit card or by cheque made out to Australasian Systematic Botany Society Inc. Members can update their contact details online at <https://asbs.org.au/login/>.

Chapter conveners

Adelaide
Vacant

Armidale
Andrew Thornhill
University of New England
andrew.thornhill@une.edu.au

Brisbane
Gill Brown
Queensland Herbarium
(+617)/(07) 3199 7699
Gillian.Brown@des.qld.gov.au

Cairns
Katharina Nargar
Australian Tropical Herbarium, CSIRO
(+617)/(07) 4232 1686
katharina.nargar@csiro.au

Canberra
Alexander Schmidt-Lebuhn
CSIRO
(+612)/(02) 6246 5498
Alexander.S-L@csiro.au

Christchurch
Rob Smissen
Allan Herbarium
(+643)/(03) 321 9803
smissenr@landcareresearch.co.nz

Darwin
Ian Cowie
Northern Territory Herbarium
(+618)/(08) 8999 4511
ian.cowie@nt.gov.au

Hobart
Miguel de Salas
Tasmanian Herbarium
(+613)/(03) 6226 1806
Miguel.deSalas@tmag.tas.gov.au

Melbourne
Vacant

Perth
Vacant

Papua New Guinea
Janet Gagul
The University of Papua New Guinea
(+675) 7232 9121
gagulj@upng.ac.pg

Sydney
Peter Weston
National Herbarium of NSW
(+612)/(02) 9231 8111
peter.weston@rbgsyd.nsw.gov.au

Wellington
Heidi Meudt
Museum of New Zealand Te Papa
Tongarewa
(+644)/(04) 381 7127
HeidiM@tepapa.govt.nz

Major Australasian herbaria and systematics institutions contacts

AD
(+618)/(08) 8222 9307
stateherbsa@sa.gov.au

HO
(+613)/(03) 6226 2635
herbarium@tmag.tas.gov.au

MEL
(+613)/(03) 9252 2300
rbg@rbg.vic.gov.au

NSW
(+612)/(02) 9231 8111
herbarium.nsw@rbgsyd.nsw.gov.au

CANB
(+612)/(02) 6246 5084
cpbr-info@anbg.gov.au

BRI
(+617)/(07) 3199 7699
queensland.herbarium@qld.gov.au

CNS
(+617)/(07) 4232 1837
enquiry@ath.org.au

PERTH
(+618)/(08) 9219 9130
herbarium@dbca.wa.gov.au

NT
(+618)/(08) 8951 8791
herbarium@nt.gov.au

DNA
(+618)/(08) 8999 4516
herbarium@nt.gov.au

AK
(+649)/(09) 306 7060
info@aucklandmuseum.com

CHR
(+643)/(03) 321 9999
schonbergeri@landcareresearch.co.nz

WELT
+64 21 406 310
bridget.hatton@tepapa.govt.nz

Australian Biological
Resources Study (ABRS)
(+612)/(02) 6250 9417
abrs@environment.gov.au

Council of Heads of
Australasian Herbaria (CHAH)
Chair: Carlos Lehnebach
chair@chah.org.au

Australian University Herbaria Rep.:
Kristina Lemson
Edith Cown University
k.lemson@ecu.edu.au

Taxonomy Australia
taxonomyaustralia@science.org.au



ISSN 2204-910X (Digital)

ISSN 1034-1218 (Paper)

\$5.00

Cover image: *Dendrobium canaliculatum* R.Br. by Ashley Field